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ABSTRACT

This curriculum guide, revised from a 1975 edition, provides teachers with up-to-date information and skill-related applications needed by practical nurses. It includes 4 sections and 24 instructional units. Each unit of instruction consists of eight basic components: performance objectives, teacher activities, information sheets, assignment sheets, job sheets, transparency masters, tests, and test and assignment sheet answers. Section A, Essential Nursing Skills, contains seven units: Developing, Implementing, and Evaluating Care Plans; Documenting Patient Care; Preparation and Care of the Preoperative and Postoperative Patient; Care of the Critically Ill Patient; Supportive Care of the Terminally Ill Patient; Human Sexuality in Illness; and Care of the Older Adult. The six units in section B, Pharmacology, are: Introduction to Pharmacology, Computing Dosages, Classification of Effects of Drugs, Administration of Medications, Intravenous Therapy, and Documentation of Medications. Section C, Maternal and Infant Care, includes six units: Introduction to Maternal and Infant Care, Prenatal Care, Care of the Patient in Labor and Delivery, Care of the Postpartum Patient, Care of the Full-term and Premature Neonate, and Immediate Care of the Newborn with Anomalies. Section D, Growth and Development, contains five units: Growth and Development of the Infant, Growth and Development of the Toddler, Growth and Development of the Preschool Child, Growth and Development of the School-Age Child, and Growth and Development of the Adolescent. (YLB)

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Practical Nursing
Volume II

HEALTH OCCUPATIONS EDUCATION

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1975

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1983

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Oklahoma State Board of Vocational and Technical Education
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FOREWORD

We believe that one of the most effective ways to improve vocational education is through a sound instructional materials delivery system. One of the most effective methods of improving the quality of instructional materials is to research, update, and revise information periodically. Students need the most current technological data to be able to function in a variety of roles within their occupation. Health occupations demand highly skilled and knowledgeable individuals prepared to assume those roles safely and competently.

The revision of *Practical Nursing II: A Course of Study* was needed to provide current information to be used in Practical Nursing programs. This comprehensive curriculum was developed to build upon the foundation set by *Practical Nursing: Volume I.* Units of study in the revised *Practical Nursing: Volume II* contain information related to essential nursing skills, pharmacology, maternal and infant care, and normal growth and development of the child. Updated skills, knowledge, and concepts were added to enable students to graduate prepared to provide quality patient care and to complete successfully their examinations to become licensed practical nurses.

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PREFACE

Times are changing, and we must be prepared to meet today's needs. The high cost of health care, the shortage of skilled nurses, nurse burnout, and nurse specialization are only a few of the issues that health care professionals must address. Nurse educators must be aware of the changes that are taking place and be able to prepare nurses realistically for the experiences they will encounter in the health field today. No longer is the nurse just "the physician's handmaiden." The nurse is now a knowledgeable and skilled health care provider.

New technology means keeping up to date with almost daily changes in equipment and procedures. Pharmacological research and production introduce new drugs and new methods of treating and curing diseases almost daily. New concepts of treatment therapies call for nurses to be more specialized in specific skills. For new nurses, this impact can be overwhelming; and, if not prepared, these nurses eventually succumb to what is known as *nurse burnout*.

I feel that the best method of dealing with these many changes is to provide the most up-to-date information necessary to teach the high level skills needed for students to be competent and confident in their roles as nurses. Through the revision process, *Practical Nursing: Volume II* has become a comprehensive guide for instructors to use in teaching new knowledge and skills that students will need to provide in-depth patient care.

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Guidance and a special feeling of cooperation that will lead to the completion of any successful project must be felt between supervisor and writer. Thanks to Joyce Sawatzky, Assistant Coordinator for Development, and to Robert Hilley, Developmental Specialist, I feel that we may be extremely proud of our product.

Thank you also to Bob Patton, Coordinator of the Curriculum and Instructional Materials Center, for his leadership and belief in me as a professional in my field and as a writer.

A great deal of research and collecting of information must take place when a curriculum is being developed. In this respect, the hours of work by Susan Hedrick, Librarian; her staff; and Sandra Lewis, Film Librarian, is greatly appreciated.

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Finally, I would like to thank warmly all of the health occupations teachers in the field. This has not been an easy year for me, and at times it was a struggle to keep moving ahead. I always knew that the teachers were behind me; but until my father's illness and death, I did not know how much they cared. The number of phone calls, letters, and offers of help in any way possible have meant a great deal to me and have helped me complete this manual at a most difficult time in my life. Thank you again.

It takes a great deal of understanding and patience and the combined effort of all our staff when a curriculum is under development. My sincere thanks to all of my CIMC co-workers and friends for their support.

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USE OF THIS PUBLICATION

Instructional Units

Practical Nursing: Volume II includes three sections and twenty-four instructional units. A standard format was established in 1970 for the development of instructional materials for all Oklahoma vocational teachers. The format includes eight basic components which form a unit of instruction: performance objectives, suggested activities for the teacher, information sheets, assignment sheets, job sheets, transparency masters, tests, and answers to tests and assignment sheets. Depending on the specific objectives, transparency masters, assignment sheets, and job sheets may or may not be included in the unit of instruction.

All of the unit components "zero in" on measurable and observable learning outcomes. Teachers are encouraged to supplement, personalize, localize, and motivate with these materials in order to develop a complete teaching-learning process.

Units of instruction are designed for use in more than one lesson or class period of instruction. Careful study of each unit of instruction by the teacher will help him or her determine the following

A. Amount of material that can be covered in each class period
B. Skills which must be demonstrated
    1. Supplies and equipment needed
    2. Amount of practice needed
    3. Amount of class time needed for demonstrations
C. Supplementary materials, such as pamphlets and filmstrips, that must be ordered
D. Resource people who must be contacted

Performance Objectives (white pages)

Each unit of instruction is based on the performance needed for successful employment in an occupational area. Performance objectives are stated in two forms: unit objectives, stating the subject matter to be covered in a unit of instruction; and specific objectives, stating the student performance necessary to reach the unit objective.

Since the objectives of the unit provide direction for the teaching-learning process, it is important that teachers and students have a common understanding of the intent of the objectives. Following is a list of performance terms, their meanings, and behavioral synonyms which may have been used in this material.

A. Name--The individual supplies a name for objects, events, or people

Behavioral synonyms: Label, list, letter, record, reiterate, repeat, write

B. Identify--The individual selects a named, described, or pictured object by pointing to it, touching it, picking it up, or selecting it

Behavioral synonyms: Select, mark, match, choose, judge

C. State a rule--The individual communicates a relationship or principle which could be used to solve problems or perform a task

D. Apply a rule--The individual supplies an answer to a problem by using a stated relationship or principle

Behavioral synonyms: Solve, calculate

E. Describe--The individual relates sufficient characteristics or properties of an object or event so that a second individual will be able to state what is being discussed

Behavioral synonyms: Define, discuss, interpret, recite, tell how, tell what happens when

F. Distinguish--The individual selects an object or event from two or more which are easily confused

Behavioral synonyms: Discriminate, differentiate

G. Order--The individual arranges three or more objects or events in a sequence based on a stated property

Behavioral synonyms: Arrange, sequence, list in order, classify, divide, isolate, sort

H. Construct--The individual makes a physical object, a verbal statement, or a drawing

(NOTE: Construct is used when the finished product or result is important.)

Behavioral synonyms: Draw, make, build, design, formulate, reproduce, transcribe, convert, put together, compile

I. Demonstrate--The individual performs several operations necessary to carry out a specified process

(NOTE: *Demonstrate* is used when it is desirable to watch the student perform a task, one of the highest levels of student performance.)

Behavioral synonyms: Show your work, show procedure, perform an experiment, perform the steps, operate, remove, replace, turn off/on, (dis) assemble, (dis) connect

The objectives should be provided for students and stressed throughout the teaching-learning process. This will help answer any questions concerning performance requirements for each instructional unit. The objectives can also help determine teaching strategies and instructional methods. Prepare for each unit by deciding how each objective can best be taught.

The objective sheet may be also used as a quick pretest to determine prior knowledge of students and to determine whether further study or activities are necessary. Teachers should feel free to modify, delete, or add objectives in order to meet the needs of the students and community. When changes in objectives are made, the teacher should remember to supply the needed information, assignment and/or job sheets, and criterion test items.

Suggested Activities (pink pages)

This component is included only in teacher material. The suggested activities page assists teachers during the preparation stage of the teaching-learning process by providing suggestions for delivery and/or presentation during the instructional process. Read the suggested activities before teaching the units so supplemental materials can be obtained, audiovisual materials prepared, and outside resources contacted. Duties of the teacher will vary according to the particular unit.

The references that are listed are ones used in the development of each unit. They should be used by the teacher to supplement knowledge of the subject area or to help students with particular interest or occupational objective in the area covered.

Information Sheet (green pages)

The information sheet provides "must know" content essential for meeting the cognitive (knowledge level) objectives of the unit. The information is written in a topical outline form and is keyed to the specific objectives.

Teachers will find that the information sheet serves as an excellent guide for presenting background knowledge necessary to develop the skills specified in the unit objective. The information sheet may also be used for coordination activities and advisory committees.

Students should read the information sheet before the information is discussed in class. Space is provided in margins for students and teachers to add notes that supplement, localize, personalize, and provide motivation for each unit.

Transparency Masters (white pages in teacher material and green in student material)

Transparency masters provide information in a special way. The students may see as well as hear the material being presented, thus reinforcing the learning process. Transparencies may present new information or they may reinforce information presented in the information sheet. They are particularly effective when identification is necessary.

Transparencies should be made and placed in the notebook where they will be immediately available for use. Transparencies direct the class's attention to the topic of discussion. It is recommended that teachers stand away from the overhead projector when discussing transparency material to avoid speaking too loudly.

Assignment Sheets (brown pages)

Assignment sheets give students a chance at problem solving, self-assessment, and/or practical experience with the information. They assist students in the application of knowledges which are necessary prerequisites to skill development. These may be given to the student for completion in class or used for homework assignments. Answer sheets are provided when appropriate and can be used by the student and/or teacher for checking student progress.

Job Sheets (blue pages)

Job sheets are another important segment of a unit of instruction. The job sheets provide a list of equipment, tools, and materials needed to complete a manipulative or psychomotor skill. They describe a step-by-step procedure needed to complete each task or job. Diagrams, photographs, and illustrations are provided to assist students in achieving the skill.

Instruments in job sheets are not in order of use. This should be taught in the classroom. In this way, students will not depend entirely on job sheets for instrument setup.

A teacher should demonstrate to students the procedures outlined in each job sheet. Furthermore, the teacher needs to localize the job sheet accordingly to the equipment and supplies available in the local lab or shop situation. Job sheets also furnish potential employers with a picture of the skills being taught and the performances they might reasonably expect from a person who has had this vocational instruction.

An additional part of the job sheet was added due to the need for a consistent format to assist teachers in evaluating job skills. This part of the job sheet is a checklist that can be used in several ways. After the teacher has covered the procedure and has demonstrated the skill, the student may then take the job sheet into the clinical laboratory practice area. Students may evaluate each other's performance by marking the Performed Well or Needs Improvement boxes in pencil. When the student feels that he or she is ready to perform the procedure for the instructor, the boxes may be checked in ink by the teacher and comments may be added.

The faculty should agree upon the critical steps of the skill and the value of each step if a grade is to be given. The checklist may have to be adapted to local policies and procedures. Steps that do not apply to your particular area may be omitted or marked N/A (non-applicable).

Tests (yellow pages)

This component provides criterion-referenced evaluation of every objective listed in the unit of instruction. It is crucial to note that both paper-pencil and performance objectives must be evaluated.

The tests may be written or oral. It is recommended that the tests be divided into shorter tests covering three or four objectives at a time and given soon after those objectives have been covered. A selection of questions from the units covered may be used for final tests at the end of each term if desired. If objectives have been added, deleted, or modified, be sure to make the changes on the test.

The acceptable response on a unit test, eighty-five percent in most units, may be raised or lowered to fit the topic or students' ability levels. The percentage applies to the overall score, not to each individual question. The final unit grade should be obtained by using the "paper-pencil" score along with teacher evaluations of student demonstrations of the desired skills.

Answers to Test and Assignment Sheets (pink pages)

These components are designed to assist the teacher in evaluation of student performances.

Page Numbering

Each publication from the Curriculum and Instructional Materials Center is assigned a specific abbreviation. For example, *Practical Nursing: Volume II* has been abbreviated PN II. The units are then numbered consecutively within each section. An example of a page number is PN II - 1-A. Because CIMC publications are loose-leaf, this system of page numbering was adopted so that pages from different manuals would not get mixed up.

Methods of Disseminating Material

Materials may be given out a unit or page at a time to keep the material before the students always new. Some teachers ask students to furnish a three-ring binder for the units while studying a particular unit. This is more convenient for taking the materials home to study. Each unit is then placed in the larger binders upon its completion. The large binders may be purchased at cost from the CIMC. Some teachers have stored the materials by units in filing cabinets or boxes until needed for use. All the units may be given out at once if desired.

Student materials should be provided for each student for best results. They may be purchased in-state for less than a teacher can reproduce the materials, especially when the teacher's time is considered. Student materials contain everything but the test answers, answers to assignment sheets, and suggested activities. The tests are collated all together at the back of student material and should be removed and stored until needed. The students should be allowed to take their materials home at the end of the year.

Teaching Methods

It is a challenge to keep students motivated. Supplement the objectives by providing the "why," personal experiences, and current information. Prepare for each unit by deciding how each objective can best be taught. Allow students to become involved in preparing and planning.

DEVELOPING, IMPLEMENTING, AND EVALUATING CARE PLANS
UNIT I

UNIT OBJECTIVE

After completing this unit, the student should be able to assess needs/problems of a patient and develop a care plan that lists appropriate actions and goals. The student should also be able to implement the care plan and evaluate its effectiveness. This knowledge will be shown by completing assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with developing, implementing, and evaluating care plans to their correct definitions.
2. Select from a list purposes of care plans.
3. Arrange in order steps to follow when assessing patient needs and problems.
4. Match Maslow's hierarchy of needs to their correct descriptions.
5. List patient care-related activities to consider when developing a basic care plan.
6. Select from a list reasons for goal setting.
7. State important guidelines to use in stating goals.
8. Distinguish among short-term, intermediate-term, and long-term goals.
9. Select from a list factors which influence the care plan.
10. Arrange in order steps in developing a care plan.
11. List criteria to remember when writing care plans.
12. Describe essential parts of a care plan.
13. List components of nursing orders or actions.
14. Match nursing intervention categories to their correct descriptions.
15. Describe methods to use the care plan in work organization.
16. State ways to communicate nursing orders/actions to patient, family, and other health staff members.

OBJECTIVE SHEET

17. Describe ways to evaluate the effectiveness of the care plan.
18. Develop care plans.
19. Use care plans to fill out work plan.
20. Evaluate the effectiveness of care plans.

DEVELOPING, IMPLEMENTING, AND EVALUATING CARE PLANS
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities

A. Order material planned to supplement unit--Film, *Nursing Care Plans*. Color, 27 minutes, American Journal of Nursing, 1974. Available from American Journal of Nursing, 555 West 87th Street, New York, New York 10019.

(NOTE: This film is available on a free-loan basis to Oklahoma teachers only. Oklahoma teachers may order films from the Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1500 West Seventh Avenue, Stillwater, Oklahoma 74074. Out-of-state teachers must order from the address accompanying the film.)

B. Make transparencies.

C. Provide students with objective sheet.

D. Provide students with information and assignment sheets.

E. Discuss unit and specific objectives.

F. Discuss information and assignment sheets.

G. Develop appropriate learning activities for special needs students.

H. Obtain nursing care plans from your clinical facility to use in Assignment Sheet #1, if the forms provided are not applicable.

I. Invite the in-service director from your hospital to conduct a more in-depth workshop on developing care plans.

J. Show care plans that have been developed and used, to demonstrate how they should be used.

K. Use Assignment Sheets #1, #2, and #3 in sequence.

(NOTE: It will be important for you to allow the students to practice filling out the first care plan in Assignment Sheet #1 until they feel comfortable in the development process. Assign patients to be used in the development of the two care plans in Part II of Assignment Sheet #1. These two patients will actually be taken care of by the student after he or she completes Assignment Sheet #2. Assignment Sheet #3 can then be used to evaluate the nursing care given to those patients.)

L. Give test; reteach if necessary.

II. Instructional materials

A. Objective sheet

B. Suggested activities

SUGGESTED ACTIVITIES

- C. Information sheet
- D. Transparency masters
  1. TM #1--Care Plan (Front Sheet)
  2. TM #2--Care Plan (Continued) (Inside Folded Sheet)
- E. Assignment sheets
  1. Assignment Sheet #1--Develop Care Plans
  2. Assignment Sheet #2--Use Care Plans to Fill Out Work Plan
  3. Assignment Sheet #3--Evaluate the Effectiveness of Care Plans
- F. Answers to assignment sheets
- G. Test
- H. Answers to test

III. Unit references

A. Bootay, Lynne Sandmeyer, et. al. *Documenting Patient Care Responsibly*. Horsham, Pennsylvania: Nursing80 Books; Intermed Communications, Inc., 1980.

B. Kron, Thora. *The Management of Patient Care*. Philadelphia: W.B. Saunders Company, 1976.

C. Little, Dolores, and Doris Carnevali. *Nursing Care Planning*. Philadelphia: J.B. Lippincott Company, 1976.

DEVELOPING, IMPLEMENTING, AND EVALUATING CARE PLANS
UNIT I

INFORMATION SHEET

I. Terms and definitions

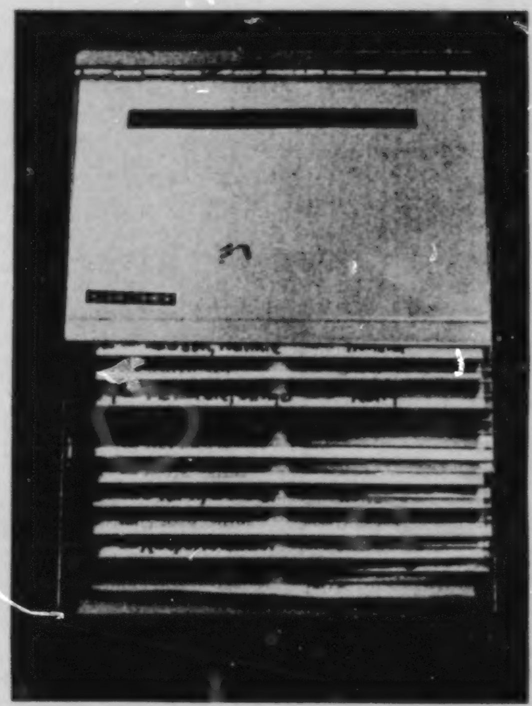
A. Care plan--Organized outline that should include patient assessment, nursing diagnosis, patient problems, expected outcomes or goals, and nursing orders/ actions that serve as a guide to individualize and provide continuity of patient care

(NOTE: The care plan is usually a written form that can be found either in a Kardex at the nurse's station or, in primary care hospitals, in the chart at the patient's bedside. Most hospitals refer to the care plan as such because it gives directions for nursing care. Some hospitals now refer to it as a patient care plan because they want to make sure the information is patient oriented and directed.)

B. Kardex--Type of container that keeps written care plan forms in an organized manner (Figure 1)

EXAMPLE:

FIGURE 1



C. Goal--End toward which effort is directed

(NOTE: Many times the terms goal and objective are used synonymously. You will need to become familiar with the term that is acceptable in your hospital.)

INFORMATION SHEET

D. Patient-nurse goal--Statement of a desired, achievable outcome to be attained within a predicted period of time, given the present situation and resources

(NOTE: All goals should be "patient-centered" and not "nurse-centered.")

EXAMPLES: Nurse centered--"The nurse will assess the patient's ability to ambulate independently."

Patient centered--"The patient will ambulate independently."

E. Medical diagnosis--Interpretation of symptoms, etiology, and pathology to arrive at a decision concerning a specific condition, disorder, or disease

EXAMPLE: Rheumatoid arthritis

F. Nursing diagnosis--Effect of the specific symptoms, etiology, and pathology on the activities and the lifestyle affecting a patient at the present and in the future

EXAMPLE: Difficulty in ambulating due to enlarged and stiff joints

G. Etiology--Study of the causes of disease

H. Standardized care plan--Pre-written guidelines for a specific condition based on common treatments, techniques, or procedures that are usually implemented in nursing care

(NOTE: Standardized care plans may be used and are efficient in reminding staff of commonalties found in specific conditions, but they *must* be modified to meet the needs of the individual patient. See example on next page.)

INFORMATION SHEET

EXAMPLE:

STANDARD CARE PLAN FOR HIP REPLACEMENT, TOTAL

Discharge Criteria:

1. Demonstrate ability to ambulate safely.
2. Verbalize specific correct knowledge of home care regimen.
3. Verbalize correct knowledge of an ability and willingness to follow M.D.'s outpatient regimen.

DATE	USUAL PROBLEMS	EXPECTED OUTCOMES	DEAD-LINES	NURSING ORDERS
	PRE-OP			
	1. Standard	1. Standard		1. Standard Prepare patient for: -Long elastic hose to enhance circulation -Post-op positioning will possibly have abduction and avoidance of flexion -Will not be turned until M.D. orders -Possible anticoagulation treatment and resultant daily blood test -Intravenous therapy; antibiotics intravenous for first few days; then given by mouth -Purpose of Hemovac and removal usually on post-op day 2 -Proper lung aeration, including intermittent positive pressure breathing treatment -Shock blocks for aiding circulation -Physical therapy: explain Hubbard tank and progressive exercise and ambulation (including skate board exercises)
	2. Potential anxiety due to surgery being a relatively new procedure	2. Verbalizes confidence in outcome	Day of Surgery	2A. Offer positive reinforcement based on previous observations B. Ascertain that M.D. has informed patient of possible complications and allow patient to ventilate concerns
	POST-OP			
	1. Standard	1. Standard		1. Standard (reinforce pre-op teaching regarding post-op care)
	IMMOBILIZED PATIENT			
	1. Standard	1. Standard		1. Standard
	2. Potential dislodging of prosthesis due to improper positioning of affected extremity	2. No sudden development of severe pain No extreme external rotation	daily	2A. Keep leg abducted and remove splint only for bath B. Avoid flexion beyond what M.D. specifies C. Do NOT turn until M.D. specifies D. When turning onto side place 3 pillows between legs and support with pillows in front and behind legs E. Do NOT turn to affected side
	3. Potential unsafe ambulation due to improper crutch-walking	3. No falls or injuries Demonstrates safe crutch-walking techniques	daily	3A. Get order for physical therapy training if necessary B. Observe ambulation at least first 2 times for proper crutch-walking C. Use walking belt at least 2 times

INFORMATION SHEET

I. Medical orders--Directives given by the physician to be carried out by an appropriate health team member to aid in diagnosis and treatment of a specific condition

J. Nursing orders--Directives given by nursing staff to individualize care of patient based on scientific rationale and knowledge of patient's condition

(NOTE: Delegated medical orders are *not* nursing orders. Many times the Kardex card will not carry the physician's orders and they are noted only in the chart. The nursing orders are based on the medical diagnosis and the form of treatment recommended.)

K. Approach--Advances or steps taken to create a desired effect

L. Rationale--Logical or fundamental reason for a course of action or procedure

(NOTE: Nursing orders and actions are based on scientific rationale. When performing any procedure or implementing any specific treatment measure, the nurse should have a reason for performing that action. Nurses must be accountable for the care they give and should be able to evaluate their actions by rationale.)

M. Need--A physiological or psychological requirement for the well-being of an organism

N. Problem--Result of an unmet need to which a person responds in a variety of ways that are presented as physical, emotional, non-verbal, or verbal symptoms

O. Nursing problem--Condition with which the nurse can help her or his patient by meeting the underlying need or by helping the patient to meet patient's own need

EXAMPLE: Patient is constantly putting on call light signal asking for attention. Nurse should be able to determine what need is being shown and determine solution.

P. Patient problem--Condition that exists when a need continues to remain unmet for any reason; the patient recognizes the need, but is unable to satisfy it because of physical, emotional, or socio-economical reasons

EXAMPLE: Difficulty in breathing due to congestion

Q. Evaluation--Determination of worth or significance by careful appraisal or study

R. Expected outcomes--Patient behavior or clinical manifestations that represent progress or prevention of a problem

INFORMATION SHEET

II. Purposes of care plans

A. To indicate the direction of nursing care

B. To provide a guide to patient-centered care and discharge planning

(NOTE: The care plan is made to attempt to meet the needs and to solve problems of the patient. The patient's total well-being is considered first, with his or her condition second, in that the condition affects the physical and emotional aspects of nursing care.)

C. To provide a means of communication with other health team members

D. To provide a guide for staff management

(NOTE: By looking at the patient's care plan, the nurse directing patient care may be able to decide how much care will be needed, how much time needs to be scheduled, and which staff member will be needed to provide the care.)

E. To provide continuity in patient care

F. To provide a basis for evaluating nursing care

(NOTE: By looking at the care plan, the documentation of nursing care, and the progress notes of the patient, nursing care actions and approaches may be evaluated.)

III. Order of steps to follow when assessing patient needs and problems

A. Review patient's history and assessment data as soon as possible after patient is admitted to the hospital

B. Interview the patient and family for more specific information

C. Identify the need or problem based on interpretation of collected data

D. Discuss problem or possible problems with other nursing and health staff in conference

IV. Maslow's hierarchy of needs

A. Physiologic or survival needs--Includes oxygen, food, fluids, elimination of body wastes, activity and rest, and sexual satisfaction; oxygen is the most important

(NOTE: If this first need is not met, then it most certainly affects the patient's ability to satisfy other needs on the hierarchy.)

B. Security or safety needs--Includes the desire for economic or job security, emotional security, spiritual security, and physical safety

(NOTE: The patient will want to know what is happening to him or her with some reliability and consistency.)

INFORMATION SHEET

C. Affection or belonging needs–Includes love, kindness, and consideration from others, and feeling that he or she belongs to a family or group

(NOTE: Your attitude towards the patient will affect his or her response to you. Showing consideration and kindness for your patient will assist you in developing a meaningful rapport.)

D. Esteem or recognition needs--Status and reputation within the group is very important, as is his or her maturity and respect for the person he or she has become

E. Self-determining or self-actualization needs–Includes the person's ability to become independent and self-directed, not depending on others for needs to be filled

(NOTE: All of these needs should be considered when developing a care plan. An individual may not be able to fulfill these needs due to the stress of illness. Consider the patient who is hostile, uncooperative, or tearful and withdrawn. These reactions might be out of frustration, or used to cope with the inability to satisfy these needs.)

V. Patient care-related activities to consider when developing a basic care plan

(NOTE: There are basic activities that are common to all persons that need to be considered when developing a patient's care plan. When writing the care plan, ask yourself if the patient is capable of doing all these activities or if he or she will need your assistance. All of these activities relate to Maslow's Hierarchy of Needs.)

A. Breathing

B. Eating and drinking

C. Eliminating body wastes

D. Moving and maintaining desirable positions

E. Sleeping and resting

F. Selecting suitable clothing; dressing and undressing

G. Maintaining body temperature within normal range by adjusting clothing or environment

H. Keeping the body clean and well-groomed, and protecting the integument

I. Communicating with others and expressing emotions, needs, fears, or opinions

J. Worshipping according to one's faith

K. Working in such a way that there is a sense of accomplishment

INFORMATION SHEET

L. Playing or participating in various forms of recreation

M. Learning, discovering, and/or satisfying the curiosity that leads to normal development and health

VI. Reasons for goal setting

(NOTE: Goals should be written on care plans as a part of the documentation process.)

A. Provides an atmosphere for teamwork as nurse, patient, and family work toward the same goals

(NOTE: When making the care plan, consult the patient and family. Give them the opportunity to give you input in setting goals.)

B. Gives concrete outcomes within various frameworks of time

C. Gives nurse and patient a sense of achievement

D. Serves as a basis for evaluating patient care

E. Considers the patient's strengths and weaknesses

VII. Important guidelines to use in stating goals

A. Be realistic

B. Take patient's wishes and individuality into consideration

C. Set a definite direction

D. Specify the outcome clearly

E. Use specific action verbs

EXAMPLES: Walk; speak; cough; turn

F. Use modifiers to make goal more specific

EXAMPLE: Walk steadily without limping

G. Identify content area clearly

(NOTE: If ambulation is a problem, then specifically state why, how, when, where, and what will be the goal or goals for this patient concerning this content area.)

H. State definite time elements to work within

(NOTE: Some goals will be for the present, others may be for next week, or even possibly for a year or two from the present.)

INFORMATION SHEET

VIII. Short-term, intermediate-term, and long-term goals

(NOTE: These also may be referred to as expected outcomes.)

A. Short-term goals

1. Are those involved with the present time, today, or this week
2. Desire immediate achievement
3. Are more concrete and possible to achieve, since they deal with the here and now
4. Shape behavior of nurse and patient in a given activity

EXAMPLES: Sleep through night without sedation; walk without assistance to bathroom and back to bed; cough and deep breathe effectively every two hours

B. Intermediate-term goals

1. Serve as a purpose or an in-between achievement

(NOTE: The goal in an intermediate time span gives both patient and nurse something to look forward to and to work for.)

2. Have longer time limits for patient to achieve skills or tasks
3. Make long-term goals seem more achievable

EXAMPLES: Manage a controlled diabetic diet; learn to administer own insulin accurately and safely; express anger in constructive manner

C. Long-term goals

1. Are more difficult to set
2. Need to be based on long-range wishes and desires of patient and his or her family
3. Need to be realistic for the condition and time set

EXAMPLE: Maintain independence as long as possible as stages of multiple sclerosis progress

IX. Factors which influence the care plan

A. Patient's age and state of dependency

B. Type and severity of illness

C. Physical facilities of the health care unit

INFORMATION SHEET

D. Type and amount of care delegated to other departments

E. Personnel available

F. Method of assigning personnel

G. Emotional/psychological state of the individual and family members

X. Steps in developing a care plan (Assignment Sheet #1)

A. Gather and interpret initial information as soon as possible after patient is admitted

(NOTE: The general admission sheet and the medical and nursing histories should help you to begin a basic care plan. As the patient progresses through his or her hospitalization, the care plan will change several times.)

B. Record and analyze any information you feel might be important in making the initial care plan

EXAMPLE: As you talk with the patient, you notice she has difficulty in swallowing. Ask questions about this condition and assess the cause. If it is due to ill-fitting dentures, you will want to take into consideration the type of diet you order. If it is due to a stroke condition, you will want to note this and remind the physician that the patient might need liquid medication rather than capsules or tablets.

C. Collect and assess data obtained by other health team members

(NOTE: Be aware of other health team members and their interactions with the patient. They will be a valuable source of information to you in your development of the care plan.)

D. Determine and write objectives of nursing care

(NOTE: Each objective must be specific, realistic, and must have a rationale.)

E. Determine and write nursing actions to accomplish each objective

(NOTE: Nursing actions must be stated in specific and direct terms. Preferences, reactions, or complaints of the patient and family must be kept in perspective. If you do not have the cooperation of the patient and family, you might as well change your nursing approach to one that is more acceptable and that you can carry out.)

F. Review plan with the health team to be sure all pertinent information and actions are included and understood

(NOTE: Care plan actions must be easily communicated to all health team members who will be providing care for that particular patient. The care plan should be clearly written so that it can be read in the change-of-shift report, in team report, or in a post-clinical conference.)

INFORMATION SHEET

G. Evaluate and revise the care plan as needed

(NOTE: Update the plan as needed to keep it current and applicable. Modify nursing actions and patient's goals as necessary when condition and/or environment changes.)

H. Use care plan to instruct the patient and his or her family in home care as patient is discharged from the hospital or transferred to another facility

XI. Criteria to remember when writing care plans

A. Care plans are required on all patients that are hospitalized for 24 hours or longer

B. Care plans should be started upon admission

(NOTE: Many institutions state in their policies the number of hours after admission within which care plans should be started.)

C. Care plans will be updated as conditions indicate

D. All notations should be clearly written and dated

(NOTE: Some facilities require that care plans be written in ink, others in pencil. The policy may also indicate whether entries are to be signed or initialled. Follow your institution's policy.)

XII. Essential parts of a care plan (Transparencies #1 and #2)

A. General patient care

1. Is usually put on the Kardex card under the heading of "general care" or "nursing measures"

2. Includes diet and fluid requirements, physical activity, personal hygiene, comfort measures, and safety

B. Delegated medical care

1. Is usually found on the Kardex card under "treatments and medications"

2. Includes any treatments or procedures that the physician delegates to the nursing staff as part of the patient's care

C. Exams or treatments delegated to other health care team members

1. May be found under special headings such as "X ray" or "laboratory"

INFORMATION SHEET

2. Includes specific procedures that physician delegates to other health team members besides the nursing staff but that does affect nursing actions

   EXAMPLE: Patient is to have colon X rays in morning; will probably need enemas or other preparation that will be a nursing responsibility

D. Nursing orders or actions

1. Are usually found in the area on the top of the Kardex form under "approaches/actions"

2. Includes the patient's needs or problems and the nursing diagnosis, and will state particular actions or approaches to provide nursing care

   (NOTE: On a formal written care plan, you probably will not see a column for rationale. As a student, you might be expected to complete a form that includes rationale. As a nurse writing a care plan, the rationale will be foremost in your mind, but probably will not be written down.)

   EXAMPLE:

TOP SHEET OF FOLDED CARE PLAN

CARE PLAN

Goal: ____________________

DATE	PROBLEMS and NEEDS	APPROACH
	DISCHARGE GOALS:	

Age Birth Date SMDW Religion Profession Adm. Date

ROOM NAME DIAGNOSIS DOCTOR

16-A

INFORMATION SHEET

INSIDE OF FOLDED CARE PLAN

DIET:	NOURISHMENT OR SPECIAL FEEDING	INTAKE OUTPUT

ACTIVITIES: ____Complete bed rest ____Bed rest ____Bathroom privileges ____Up ad lib	BATH: ____Bathe patient ____Partial ____Bathe Self ____Tub ____Shower	TRAVEL: ____Wheelchair ____Stretcher ____Ambulatory	POSITION:

SIDERAILS: ____Constantly ____Nights only ____Siderail Release	OXYGEN: ____Liters per minute ____PRN ____Constantly ____Tent ____Catheter ____Mask ____Cannula	SPECIAL EQUIPMENT:
PROSTHESIS: ____Dentures ____Eye ____Contact Lens ____Limb	ALLERGIES: SPECIAL PRIVILEGES:	WEIGHT ____________ TEMP. TIMES ____ORAL ____RECTAL ____ ____ ____AX

DATE	TREATMENTS
PRN	

ROOM NAME DIAGNOSIS DOCTOR

INFORMATION SHEET

XIII. Components of nursing orders or actions

A. Date

B. Precise action verb and possibly a modifier

(NOTE: In some cases the person directed to perform a certain procedure is noted.)

EXAMPLE: Hyperalimentation line dressing changed $\dot{\bar{q}}$ 24 hours by RN.

C. Content area

D. Time element

E. Signature or initials, and title

XIV. Nursing intervention categories

(NOTE: When you make out your care plan, think of these areas and determine which actions you will need to initiate.)

A. Assistive--One in which the nurse helps carry out those normal daily activities that cannot be carried out by the patient

B. Hygienic--One that is necessary for maintenance of cleanliness

C. Rehabilitative--One that supports improved or independent activity and function in various areas

EXAMPLES: Mobility; retraining bowel and bladder functions; referral to resource persons; budgeting finances

D. Supportive--One in which the nurse provides objects, facilities, or processes that assist patient in maintaining a healthy environment

EXAMPLES: Exercise; sleep; body alignment; walker; wheelchair

E. Preventive--One in which the nurse provides protective or precautionary measures to avert physical or behavioral illness

F. Observational--One in which the nurse checks for and monitors physical responses and behavioral responses to illness and associated therapy

G. Educative--One in which the nurse provides accurate health information and explanation of treatment

INFORMATION SHEET

XV. Methods to use the care plan in work organization (Assignment Sheet #2)

A. Listen carefully if verbal report is being given from the care plan; take notes on what type of care your patient(s) is/are to receive

B. Read the care plan to further reinforce your knowledge of the patient's care

C. Ask questions if you do not understand the information on the nursing care plan

(NOTE: Know your own limitations. NEVER assume you know what is being asked for, if you are unsure. If you do not understand or do not know how to perform a certain procedure, ask for assistance.)

D. Look at each care plan and write down patient's name, room number, physician's name, diagnosis, and any procedure, treatment, or other information about that particular patient's care

(NOTE: When you begin giving patient care, your instructor will probably give you a lighter work assignment. As your knowledge and confidence increase, you will be given more difficult and more serious cases to care for. As soon as possible, learn to read patients' charts effectively and gather needed information in planning and giving nursing care.)

E. Set work plan priorities by looking at the nursing care you are to give and determine which patient to begin with or which task to accomplish first

EXAMPLES: Mary Haskins--Room 314 will need a complete bed bath this a.m.

John Meyer--Room 302B is scheduled for surgery this a.m. and will need a shower prior to surgery

Sue Janson--Room 310 will need assistance with her bath as she is four days post-op and is up and around with some assistance

(NOTE: If you have been assigned these three patients to care for this morning, you will need to look at what will be happening to these patients as you plan care. If Mr. Meyer is going to surgery, he will need his shower first. Ms. Janson may only need you to set up her bath water, get all of her needed toiletries out, and place her call signal light nearby in case she may need something else. Ms. Haskins is going to need the most care in matters of time. You will want to schedule your time so that you can give her a complete, thorough bed bath.)

F. Check the care plan and chart frequently for new orders or procedures

G. Document your care and any observations in the chart or on a piece of paper

(NOTE: At first, you will not be writing on the patient's chart until you have more experience in writing nursing notes. Be sure to keep your notes on a piece of paper or the form that your instructor gives you. Keep that piece of paper with you at all times.)

INFORMATION SHEET

XVI. Ways to communicate nursing orders/actions to patient, family, and other health staff members

A. Keep patient and his or her family informed

B. Allow patient and family to be a part of decision-making concerning nursing care whenever possible

C. Alert all health care team members to specific approaches by posting signs or forms in appropriate places

EXAMPLE: Patients suspected of having kidney stones will need to have all urine strained using special strainers each time they void. Place a sign in patient's bathroom, or in a noticeable place if patient does not have a bathroom, to "STRAIN ALL URINE"

D. Report any information to next shift of nurses that they will need to know to provide continuity in patient care

EXAMPLE: If taking care of Mr. James, and you have found he is able to breathe better on his right side, be sure to document this finding in the chart, add it to the care plan, and let the next nurse know this information.

XVII. Ways to evaluate the effectiveness of the care plan (Assignment Sheet #3)

A. Assess the patient's progress

1. Check each approach or goal to see how much improvement the patient has made

2. Talk to the patient about his or her progress and see if any adjustments need to be made in care plan

B. Compare the care plan with the patient's chart

1. Keep track of patient's progress through documentation on the chart

EXAMPLE: If one of the goals was to have an intake of 1500 cc of fluid per 24 hours, check I & O chart to see if this has been accomplished. If intake has not improved, check to see if patient is being offered fluids, if fluids are acceptable and liked by the patient, or possibly that patient does not know that this is one of the goals.

INFORMATION SHEET

2. Make sure that dates on the care plan are current for the level of activity the patient should be able to perform

   EXAMPLE: If the care plan has "2/14 Assist in ambulating length of hall X2 daily" and the patient has been noted out in the hall, or in the lounge without assistance and you see the information documented in the chart, then it is time to set a different goal.

C. Prepare checklists

1. Set up some type of system for evaluating the progress in each area

2. Make sure everyone including the patient and family understands the checklist system

   (NOTE: See example on next page.)

D. Refer to goals and plans to evaluate patient's discharge plan

1. Check patient's progress frequently and look ahead to see if patient is progressing according to goals and times set

2. Modify goals and set different time limits if needed

INFORMATION SHEET

EXAMPLE: Diagnosis: New diabetic 4/15/yr

	4/15	4/16	4/17	4/18
DIET	Explained diet exchanges J. Erving, Dietician	Assisted in selecting foods from exchange lists J. Erving, Dietician	Selected diet on own using exchange lists J. Erving, Dietician	Was able to explain exchange system to wife--used menus to plan diets at home J. Erving, Dietician
INSULIN	Explained technique of administration T. Steward, LPN	Handled equipment and asked questions T. Steward, LPN	Prepared medicine and gave injection T. Steward, LPN	Verbalized each step of the procedure for administering insulin and performed each step using aseptic technique T. Steward, LPN
URINE TESTING	Explained and demonstrated test T. Steward, LPN	Returned dem. charted results T. Steward, LPN	Forgot test at noon--reminded of importance T. Steward, LPN	Testing urine and completing chart on own T. Steward, LPN

Care Plan
(Front Sheet)

CARE PLAN

Goal: ______________________________

DATE	PROBLEMS and NEEDS	APPROACH
	DISCHARGE GOALS:	

Age	Birth Date	SMDW	Religion	Profession	Adm. Date

ROOM	NAME	DIAGNOSIS	DOCTOR

TM #1

Care Plan (Continued)
(Inside Folded Sheet)

DIET:

NOURISHMENT OR SPECIAL FEEDING

INTAKE

OUTPUT

ACTIVITIES:
___ Complete bed rest
___ Bed rest
___ Bathroom privileges
___ Up ad lib

BATH:
___ Bathe patient
___ Partial
___ Bathe Self
___ Tub
___ Shower

TRAVEL:
___ Wheelchair
___ Stretcher
___ Ambulatory

POSITION:

SIDERAILS:
___ Constantly
___ Nights only
___ Siderail Release

OXYGEN:
___ Liters per minute
___ PRN ___ Constantly
___ Tent ___ Catheter
___ Mask ___ Cannula

SPECIAL EQUIPMENT:

PROSTHESIS:
___ Dentures
___ Eye
___ Contact Lens
___ Limb

ALLERGIES:

SPECIAL PRIVILEGES:

WEIGHT ____________

TEMP. ___ TIMES ___ ___ ORAL ___ RECTAL ___ AX

DATE	TREATMENTS
PRN	

ROOM NAME DIAGNOSIS DOCTOR

DEVELOPING, IMPLEMENTING, AND EVALUATING CARE PLANS
UNIT I

ASSIGNMENT SHEET #1--DEVELOP CARE PLANS

NAME ______________________ SCORE ____________

Developing a care plan is not an easy task, and it requires much planning. When you begin writing care plans, you should develop a consistent method based on the knowledge you have at that time. In this unit you are learning the basics of preparing, implementing, and evaluating care plans. As your knowledge and experience increase, so will the depth of your plan. This exercise contains two parts, and instructions are given for each one as it applies to developing care plans. Be sure on each part that you are able to provide a rationale for each of the nursing actions/approaches you plan for your patient.

EXAMPLE:

BATH: Bathe patient

ACTIVITIES: Up with assistance

DATE	PROBLEMS AND NEEDS	APPROACH	RATIONALE
4/20	Prevent decubiti from forming	Bathe using lotion soap, pat dry, apply cream lotion to all bony prominences and massage gently	Bathing with warm water and massaging stimulates the circulation. Using lotion soap keeps skin from drying out
4/20	Prevent contractures	Turn q 2 hrs., protect ankles and knees by placing pillow between areas	Prevents muscle tension that interferes with joint movement
		Provide range-of-motion exercise x2 daily	Prevents atrophy of muscle tissue and maintains joint action

ASSIGNMENT SHEET #1

PART I

From the case study information given, develop a care plan. Remember to write in pencil on the care plan and remember where the specific information is to be written. From the information taken from the initial assessment, identify needs/problems and goals for this particular patient and write on the front of the Kardex card. Number your problems, needs, goals, and approaches so that you may write your rationale in the space provided. As you think through your actions/approaches, you should remember that this information is the basis for your nursing care.

CASE STUDY

Patient: Judith Walker Birth date: 6/17/1903 Age: 78

Doctor: J.W. Wenzel, M.D. Religion: Protestant Room: 311

Admitted: 4/21/82

Admitting diagnosis: Gastroenteritis

Symptoms: Weakness, nausea and vomiting, dehydration, chilling, discomfort in stomach

Background information: Obtained from ER sheet

Mrs. Walker lives alone except for her cat, "Tabby." Her husband Roger died of a heart attack a year ago. Since that time Mrs. Walker hasn't gone out much since she doesn't drive and hates to "trouble anyone" to take her anyplace. Neighbors check on her occasionally to see if she needs anything. Two days ago she stated her stomach was bothering her and she was nauseated. Approximately 24 hours ago she began vomiting and "couldn't seem to stop" and became quite weak. Her neighbor brought her to the ER after finding her lying on the bathroom floor.

Medical history: Usual childhood diseases. Tonsilectomy at age 10, one child (male) died in an accident at age 26, complete hysterectomy at age 52. Has been in relatively good health the past few years. Sprained right wrist last year when she slipped on the ice on the front porch, it has remained weak and aches occasionally. Wears glasses for reading, full set of dentures, NO ALLERGIES.

Medication: Vitamin B complex and calcium supplements

Diet information: Mrs. Walker at 5'7" weighs 102 lbs. and says she has an "average diet." Doesn't each much meat as it hurts her stomach at times, but she does like vegetables. States she "doesn't cook much since Mr. Walker died, and eats a lot of canned vegetables."

Initial observations:

VS: T. 102°F P. 96 R. 16 B/P 102/70

Mrs. Walker was lying in bed with sheet, spread, and two blankets pulled up under her chin. She c/o chilling and nausea. Cheeks appeared flushed and skin was dry and hot to touch. Her tongue was coated and her eyes dull and filmed. Mrs. Walker was pulling nervously at the covers and asked that the light be dimmed as it hurt her eyes. She was quite concerned about "Tabby" being alone and asked that her neighbor Mrs. Walsh be called to check on her. This was accomplished and Mrs. Walker seemed much relieved.

ASSIGNMENT SHEET #1

Physician's initial orders:

4/21/82 1. CBC and Diff., UA for C&S

2. Ice chips only first 24 hours

3. Bed rest with BRP

4. Schedule UGI series for 4/23/82

5. Start IV c̄ 1,000 cc NS over 12 hour period, DC if vomiting ceases

6. Tigan 200 mg. t.i.d. (R) or until nausea ceases

7. Wait 12 hours, if vomiting persists insert NG tube to low suction

8. For temperature above 101° give Tylenol gr. X suppository prn

9. Monitor VS q 4 hours.

Fill out care plan on the next page using all of the above information. If your clinical facility uses a different type of nursing care plan, your instructor will provide you with one. Write in the doctor's orders, then determine nursing orders/actions that you would follow to care for Mrs. Walker. For every problem/need or approach, write the rationale in the space provided. Discuss your care plan in class and compare your approaches with classmates'. Determine the best nursing care to be given.

PN II - 31-A

ASSIGNMENT SHEET #1

DIET:

NOURISHMENT OR SPECIAL FEEDING

INTAKE

OUTPUT

ACTIVITIES:
____Complete bed rest
____Bed rest
____Bathroom privileges
____Up ad lib

BATH:
____Bathe patient
____Partial
____Bathe Self
____Tub
____Shower

TRAVEL:
____Wheelchair
____Stretcher
____Ambulatory

POSITION:

SIDERAILS:
____Constantly
____Nights only
____Siderail Release

OXYGEN:
____Liters per minute
____PRN ____Constantly
____Tent ____Catheter
____Mask ____Cannula

SPECIAL EQUIPMENT:

PROSTHESIS:
____Dentures
____Eye
____Contact Lens
____Limb

ALLERGIES:

SPECIAL PRIVILEGES:

WEIGHT ____________

TEMP. TIMES ____ORAL
____RECTAL
_____ _____ ____AX

DATE	TREATMENTS
PRN	

ROOM NAME DIAGNOSIS DOCTOR

ASSIGNMENT SHEET #1

CARE PLAN

Goal: ____________________

DATE	PROBLEMS and NEEDS	APPROACH
	DISCHARGE GOALS:	

Age Birth Date SMDW Religion Profession Adm. Date

ROOM NAME DIAGNOSIS DOCTOR

RATIONALE

1) ____________________

2) ____________________

3) ____________________

ASSIGNMENT SHEET #1

4) ______________________________

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5) ______________________________

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6) ______________________________

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7) ______________________________

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8) ______________________________

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9) ______________________________

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10) ______________________________

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ASSIGNMENT SHEET #1

PART II

In this part of the exercise you are to develop two care plans on the following pages using patients assigned to you by your instructor. If the patient has been in the hospital for several days you will need to check the Kardex, chart, and possibly the nursing notes to get initial information to use in your care plan. You may find nursing actions and goals already being implemented on the plan that you will need to evaluate and add new approaches to use in giving care. Be sure that you are thorough in your planning, as you will need to use these two care plans for your next assignment sheet.

PN II - 35-A

ASSIGNMENT SHEET #1

PART II

DIET:

NOURISHMENT OR SPECIAL FEEDING

INTAKE

OUTPUT

ACTIVITIES:
- ___ Complete bed rest
- ___ Bed rest
- ___ Bathroom privileges
- ___ Up ad lib

BATH:
- ___ Bathe patient
- ___ Partial
- ___ Bathe Self
- ___ Tub
- ___ Shower

TRAVEL:
- ___ Wheelchair
- ___ Stretcher
- ___ Ambulatory

POSITION:

SIDERAILS:
- ___ Constantly
- ___ Nights only
- ___ Siderail Release

OXYGEN:
- ___ Liters per minute
- ___ PRN ___ Constantly
- ___ Tent ___ Catheter
- ___ Mask ___ Cannula

SPECIAL EQUIPMENT:

PROSTHESIS:
- ___ Dentures
- ___ Eye
- ___ Contact Lens
- ___ Limb

ALLERGIES:

SPECIAL PRIVILEGES:

WEIGHT ____________

TEMP. TIMES ___ ORAL

___ RECTAL

_____ _____ ___ AX

DATE	TREATMENTS
PRN	

ROOM NAME DIAGNOSIS DOCTOR

ASSIGNMENT SHEET #1

PART II

#1

CARE PLAN

Goal:

DATE	PROBLEMS and NEEDS	APPROACH
	DISCHARGE GOALS:	

Age | Birth Date | SMDW | Religion | Profession | Adm. Date

ROOM | NAME | DIAGNOSIS | DOCTOR

RATIONALE

1)

2)

ASSIGNMENT SHEET #1

3) ____________________

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4) ____________________

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5) ____________________

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6) ____________________

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7) ____________________

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8) ____________________

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9) ____________________

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10) ____________________

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ASSIGNMENT SHEET #1

PART II

DIET:

NOURISHMENT OR SPECIAL FEEDING

INTAKE

OUTPUT

ACTIVITIES:

____Complete bed rest
____Bed rest
____Bathroom privileges
____Up ad lib

BATH:

____Bathe patient
____Partial
____Bathe Self
____Tub
____Shower

TRAVEL:

____Wheelchair
____Stretcher
____Ambulatory

POSITION:

SIDERAILS:

____Constantly
____Nights only
____Siderail Release

OXYGEN:

____Liters per minute
____PRN ____Constantly
____Tent ____Catheter
____Mask ____Cannula

SPECIAL EQUIPMENT:

PROSTHESIS:

____Dentures
____Eye
____Contact Lens
____Limb

ALLERGIES:

SPECIAL PRIVILEGES:

WEIGHT ____________

TEMP.	TIMES	
		____ORAL
		____RECTAL
_____	_____	____AX

DATE	TREATMENTS
PRN	

ROOM NAME DIAGNOSIS DOCTOR

PN II - 39-A

ASSIGNMENT SHEET #1

PART II

#2

CARE PLAN

Goal: ______________________________

DATE	PROBLEMS and NEEDS	APPROACH
	DISCHARGE GOALS:	

Age	Birth Date	SMDW	Religion	Profession	Adm. Date

ROOM	NAME	DIAGNOSIS	DOCTOR

RATIONALE

1) ______________________________

____

2) ______________________________

____

ASSIGNMENT SHEET #1

3) ______________________________

____

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4) ______________________________

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5) ______________________________

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6) ______________________________

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7) ______________________________

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8) ______________________________

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9) ______________________________

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10) ______________________________

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DEVELOPING, IMPLEMENTING, AND EVALUATING CARE PLANS
UNIT I

ASSIGNMENT SHEET #2–USE CARE PLANS TO FILL OUT WORK PLAN

NAME____ SCORE ____________

Planning your work is necessary if you are to be effective in giving quality patient care. So that you may give each task the amount and quality of time it needs to be done correctly, you must learn to set priorities. Whether you have one patient or many, you should ask yourself these questions: What is to be done for the patient? Where will I be doing this care? Why will I be providing this type of care? When will I be doing this care? How will I accomplish the tasks? Who will I need to help with this care? The amount of work that you can accomplish will depend on the time that you will be in the clinical facility. You first must consider how many hours you will be spending in the clinical facility and the patient load that you will have. If you are to begin the morning shift at morning report and stay through the lunch hour, you will need to consider the tasks assigned to you so that you can complete all your nursing care in that time limit. The longer the time, the more tasks you will need to plan for.

Use the last two care plans in Assignment Sheet #1 to fill out work plans according to the following directions. Consider that you will be in the clinical area from 6:30 a.m. to 1:00 p.m. After you fill out the work plan, set priorities for your tasks. Number each one as you would perform it.

WORK PLAN FOR TWO PATIENTS

TIME	PATIENT'S INITIALS	TASK	AMOUNT OF TIME NEEDED	COMPLETED

ASSIGNMENT SHEET #2

TIME	PATIENT'S INITIALS	TASK	AMOUNT OF TIME NEEDED	COMPLETED

DEVELOPING, IMPLEMENTING, AND EVALUATING CARE PLANS
UNIT I

ASSIGNMENT SHEET #3–EVALUATE THE EFFECTIVENESS OF CARE PLANS

NAME______________________________ SCORE ______________

After developing care plans in Assignment Sheet #1, making work plans in Assignment Sheet #2, and giving care to those patients, you should be able to evaluate the effectiveness of your plan. Did you meet all of the patient's needs or attempt to solve some of the problems listed on your care plan? Did you recognize new needs or problem areas and attempt to find answers to meet them? How could you have changed your care plan to make it more effective for your patients? Could you have better organized your time? Evaluate your nursing care for the two patients you developed care plans for in Assignment Sheet #1 and performed the nursing care for, using the format given on the next page. Discuss each one in class and compare with classmates.

ASSIGNMENT SHEET #3

CARE PLAN #1

Patient's Initials________________

	TASK	ACCOMPLISHED	CHANGES
DIET			
HYGIENE			
AMBULATION			
TREATMENTS			
OTHER			

ASSIGNMENT SHEET #3

CARE PLAN #2

Patient's Initials ______________

	TASK	ACCOMPLISHED	CHANGES
DIET			
HYGIENE			
AMBULATION			
TREATMENTS			
OTHER			

DEVELOPING, IMPLEMENTING, AND EVALUATING CARE PLANS
UNIT I

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

Assignment Sheet #2--Evaluated to the satisfaction of the instructor

Assignment Sheet #3--Evaluated to the satisfaction of the instructor

DEVELOPING, IMPLEMENTING, AND EVALUATING CARE PLANS
UNIT I

TEST

NAME_______________________________________ SCORE __________________

1. Match terms associated with developing, implementing, and evaluating care plans to their correct definitions. Write the correct numbers in the blanks.

_____a. End toward which effort is directed

_____b. Interpretation of symptoms, etiology, and pathology to arrive at a decision concerning a specific condition, disorder, or disease

_____c. Organized outline that should include patient assessment, nursing diagnosis, patient problems, expected outcomes or goals, and nursing orders/actions that serve as a guide to individualize and provide continuity of patient care

_____d. Statement of a desired, achievable outcome to be attained within a predicted period of time, given the present situation and resources

_____e. Type of container that keeps written care plan forms in an organized manner

_____f. Effect of the specific symptoms, etiology, and pathology on the activities and the lifestyle affecting a patient at the present and in the future

_____g. Study of the causes of disease

_____h. Pre-written guidelines for a specific condition based on common treatments, techniques, or procedures that are usually implemented in nursing care

_____i. Result of an unmet need to which a person responds in a variety of ways that are presented as physical, emotional, non-verbal, or verbal symptoms

_____j. Logical or fundamental reason for a course of action or procedure

_____k. A physiological or psychological requirement for the well-being of an organism

1. Kardex
2. Goal
3. Patient-nurse goal
4. Medical diagnosis
5. Nursing diagnosis
6. Etiology
7. Care plan
8. Standardized care plan
9. Rationale
10. Problem
11. Need

TEST

_____l. Advances or steps taken to create a desired effect

_____m. Directives given by the physician to be carried out by an appropriate health team member to aid in diagnosis and treatment of a specific condition

_____n. Condition that exists when a need continues to remain unmet for any reason; the patient recognizes the need, but is unable to satisfy it because of physical, emotional, or socio-economical reasons

_____o. Condition with which the nurse can help her or his patient by meeting the underlying need or by helping the patient to meet her or his own need

_____p. Directives given by nursing staff to individualize care of patient based on scientific rationale and knowledge of patient's condition

_____q. Patient behavior or clinical manifestations that represent progress or prevention of a problem

_____r. Determination of worth or significance by careful appraisal or study

12. Medical orders
13. Approach
14. Nursing orders
15. Patient problem
16. Nursing problem
17. Expected outcomes
18. Evaluation

2. Select from the following list purposes of care plans. Write an "X" in the blank before each correct answer.

_____a. To provide a guide to patient-centered care and discharge planning

_____b. To provide continuity in patient care

_____c. To reduce the amount of charting

_____d. To indicate the direction of nursing care

_____e. To shorten the amount of time spent at bedside

_____f. To provide a means of communication with other health team members

_____g. To provide a basis for evaluating nursing care

_____h. To provide a guide for staff management

TEST

3. Arrange in order steps to follow when assessing patient needs and problems. Write a "1" by the first step, a "2" by the second step and so on.

_____a. Identify the need or problem based on interpretation of collected data

_____b. Review patient's history and assessment data as soon as possible after patient is admitted to the hospital

_____c. Discuss problem or possible problems with other nursing and health staff in conference

_____d. Interview the patient and family for more specific information

4. Match Maslow's hierarchy of needs to their correct descriptions. Write the correct numbers in the blanks.

_____a. Includes love, kindness, and consideration from others, and feeling that he or she belongs to a family or group

_____b. Status and reputation within group is very important, as is his or her maturity and respect for the person he or she has become

_____c. Includes oxygen, food, fluids, elimination of body wastes, activity and rest, and sexual satisfaction; oxygen is the most important

_____d. Includes the person's ability to become independent and self-directed, not depending on others for needs to be filled

_____e. Includes the desire for economic or job security, emotional security, spiritual security, and physical safety

1. Security or safety needs
2. Esteem or recognition needs
3. Self-determining or self-actualization needs
4. Physiologic or survival needs
5. Affection or belonging needs

5. List patient care-related activities to consider when developing a basic care plan.

a. ______________________________

____

b. ______________________________

____

c. ______________________________

____

TEST

d. ______________________________

____

e. ______________________________

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f. ______________________________

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g. ______________________________

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h. ______________________________

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i. ______________________________

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j. ______________________________

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k. ______________________________

____

l. ______________________________

____

m. ______________________________

____

6. Select from the following list reasons for goal setting. Write an "X" in the blank before each correct answer.

_____a. Gives concrete outcomes within various frameworks of time

_____b. Considers the patient's strengths and weaknesses

_____c. Shortens patient's hospital stay

_____d. Provides an atmosphere for teamwork as nurse, patient, and family work toward the same goals

_____e. Gives nurse and patient a sense of achievement

TEST

_____f. Serves as a basis for evaluating patient care

_____g. Lessens workload of health care team

7. State important guidelines to use in stating goals.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

g. ______________________________

h. ______________________________

8. Distinguish among short-term, intermediate-term, and long-term goals. Write in the correct blank an "ST" for short-term, an "IT" for intermediate-term, and an "LT" for long-term goals.

_____a. Are more concrete and possible to achieve, since they deal with the here and now

_____b. Are those involved with the present time, today, or this week

_____c. Are more difficult to set

_____d. Make long-term goals seem more achievable

_____e. Desire immediate achievement

_____f. Serve as a purpose or an in-between achievement

_____g. Need to be based on long-range wishes and desires of patient and his or her family

_____h. Shape behavior of nurse and patient in a given activity

_____i. Need to be realistic for the condition and time set

_____J. Have longer time limits for patient to achieve skills or tasks

9. Select from the following list factors which influence the care plan. Write an "X" in the blank before each correct answer.

_____a. Personnel available

_____b. Method of assigning personnel

TEST

_____c. Financial status of patient

_____d. Type and severity of illness

_____e. The day of the week

_____f. Patient's age and state of dependency

_____g. Physical facilities of the health care unit

_____h. Type and amount of care delegated to other departments

_____i. Emotional/psychological state of the individual and family members

10. Arrange in order steps in developing a care plan. Write a "1" before the first step, a "2" before the second step, and so on.

_____a. Gather and interpret initial information as soon as possible after patient is admitted

_____b. Determine and write nursing actions to accomplish each objective

_____c. Use care plan to instruct the patient and his or her family in home care as patient is discharged from the hospital or transferred to another facility

_____d. Collect and assess data obtained by other health team members

_____e. Review plan with the health team to be sure all pertinent information and actions are included and understood

_____f. Evaluate and revise the care plan as needed

_____g. Determine and write objectives of nursing care

_____h. Record and analyze any information you feel might be important in making the initial care plan

11. List criteria to remember when writing care plans.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

TEST

12. Describe essential parts of a care plan.

a. General patient care--____________________

b. Delegated medical care--____________________

c. Exams or treatments delegated to other health care team members--__________

d. Nursing orders or actions--____________________

13. List components of nursing orders or actions.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

TEST

14. Match nursing intervention categories to their correct descriptions. Write the correct numbers in the blanks.

_____a. One in which the nurse provides accurate health information and explanation of treatment

_____b. One that is necessary for maintenance of cleanliness

_____c. One in which the nurse provides protective or precautionary measures to avert physical or behavioral illness

_____d. One in which the nurse provides objects, facilities, or processes that assist patient in maintaining a healthy environment

_____e. One that supports improved or independent activity and function in various areas

_____f. One in which the nurse checks for and monitors physical responses and behavioral responses to illness and associated therapy

_____g. One in which the nurse helps carry out those normal daily activities that cannot be carried out by the patient

1. Preventive
2. Observational
3. Supportive
4. Educative
5. Hygienic
6. Rehabilitative
7. Assistive

15. Describe methods to use the care plan in work organization.

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TEST

16. State ways to communicate nursing orders/actions to patient, family, and other health staff members.

a. ______________________________

____

b. ______________________________

____

c. ______________________________

____

d. ______________________________

____

17. Describe ways to evaluate the effectiveness of the care plan.

a. Assess the patient's progress-- ______________________________

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b. Compare the care plan with the patient's chart– ______________________________

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____

____

TEST

c. Prepare checklists--______________________________

____

____

____

____

d. Refer to goals and plans to evaluate patient's discharge plan--______________

____

____

____

____

(NOTE: Test questions 18-20 list assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

18. Develop care plans.

19. Use care plans to fill out work plan.

20. Evaluate the effectiveness of care plans.

DEVELOPING, IMPLEMENTING, AND EVALUATING CARE PLANS
UNIT I

ANSWERS TO TEST

1. a. 2
   b. 4
   c. 7
   d. 3
   e. 1
   f. 5
   g. 6
   h. 8
   i. 10
   j. 9
   k. 11
   l. 13
   m. 12
   n. 15
   o. 16
   p. 14
   q. 17
   r. 18
2. a, b, d, f, g, h
3. a. 3
   b. 1
   c. 4
   d. 2
4. a. 5
   b. 2
   c. 4
   d. 3
   e. 1
5. a. Breathing
   b. Eating and drinking
   c. Eliminating body wastes
   d. Moving and maintaining desirable positions
   e. Sleeping and resting
   f. Selecting suitable clothing; dressing and undressing
   g. Maintaining body temperature within normal range by adjusting clothing or environment
   h. Keeping the body clean and well-groomed, and protecting the integument
   i. Communicating with others and expressing emotions, needs, fears, or opinions

ANSWERS TO TEST

j. Worshipping according to one's faith

k. Working in such a way that there is a sense of accomplishment

l. Playing or participating in various forms of recreation

m. Learning, discovering, and/or satisfying the curiosity that leads to normal development and health

6. a, b, d, e, f

7. a. Be realistic

b. Take patient's wishes and individuality into consideration

c. Set a definite direction

d. Specify the outcome clearly

e. Use specific action verbs

f. Use modifiers to make goal more specific

g. Identify content area clearly

h. State definite time elements to work within

8. a. ST

b. ST

c. LT

d. IT

e. ST

f. IT

g. LT

h. ST

i. LT

j. IT

9. a, b, d, f, g, h, i

10. a. 1

b. 5

c. 8

d. 3

e. 6

f. 7

g. 4

h. 2

11. a. Care plans are required on all patients that are hospitalized for 24 hours or longer

b. Care plans should be started upon admission

c. Care plans will be updated as conditions indicate

d. All notations should be clearly written and dated

ANSWERS TO TEST

12. Descriptions should include the following

    a. General patient care

        1) Is usually put on the Kardex card under the heading of "general care" or "nursing measures"

        2) Includes diet and fluid requirements, physical activity, personal hygiene, comfort measures, and safety

    b. Delegated medical care

        1) Is usually found on the Kardex card under "treatments and medications"

        2) Includes any treatments or procedures that the physician delegates to the nursing staff as part of the patient's care

    c. Exams or treatments delegated to other health care team members

        1) May be found under special headings such as "X ray" or Laboratory"

        2) Includes specific procedures that physician delegates to other health team members besides the nursing staff but that does affect nursing actions

    d. Nursing orders or actions

        1) Are usually found in the area on the top of the Kardex form under "approaches/actions"

        2) Includes the patient's needs or problems and the nursing diagnosis, and will state particular actions or approaches to provide nursing care

13. a. Date

    b. Precise action verb and possibly a modifier

    c. Content area

    d. Time element

    e. Signature or initials, and title

14. a. 4

    b. 5

    c. 1

    d. 3

    e. 6

    f. 2

    g. 7

ANSWERS TO TEST

15. Description should include the following

    a. Listen carefully if verbal report is being given from the care plan; take notes on what type of care your patient(s) is/are to receive

    b. Read the care plan to further reinforce your knowledge of the patient's care

    c. Ask questions if you do not understand the information on the nursing care plan

    d. Look at each care plan and write down patient's name, room number, physician's name, diagnosis, and any procedure, treatment, or other information about that particular patient's care

    e. Set work plan priorities by looking at the nursing care you are to give and determine which patient to begin with or which task to accomplish first

    f. Check the care plan and chart frequently for new orders or procedures

    g. Document your care and any observations in the chart or on a piece of paper

16. a. Keep patient and his or her family informed

    b. Allow patient and family to be a part of decision-making concerning nursing care whenever possible

    c. Alert all health care team members to specific approaches by posting signs or forms in appropriate places

    d. Report any information to next shift of nurses that they will need to know to provide continuity in patient care

17. Descriptions should include the following

    a. Assess the patient's progress

        1) Check each approach or goal to see how much improvement the patient has made

        2) Talk to the patient about his or her progress and see if any adjustments need to be made in care plan

    b. Compare the care plan with the patient's chart

        1) Keep track of patient's progress through documentation on the chart

        2) Make sure that dates on the care plan are current for the level of activity the patient should be able to perform

ANSWERS TO TEST

c. Prepare checklists

  1) Set up some type of system for evaluating the progress in each area

  2) Make sure everyone including the patient and family understand the checklist system

d. Refer to goals and plans to evaluate patient's discharge plan

  1) Check patient's progress frequently and look ahead to see if patient is progressing according to goals and times set

  2) Modify goals and set different time limits if needed

18. Evaluated to the satisfaction of the instructor

19. Evaluated to the satisfaction of the instructor

20. Evaluated to the satisfaction of the instructor

DOCUMENTING PATIENT CARE
UNIT II

UNIT OBJECTIVE

After completing this unit, the student should be able to write neat, accurate nursing notes using the correct medical terminology. This knowledge will be shown by completing assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with documenting patient care to the correct definitions.
2. Write meanings of common prefixes used in health professions.
3. Match common prefixes to their correct meanings.
4. Write meanings of common suffixes used in medical terminology.
5. Select from a list reasons for documenting patient care.
6. State basic guidelines to follow when writing nurses notes.
7. Describe ways to avoid common problems in documenting patient care.
8. Arrange in order steps used to make corrections in nurses notes.
9. Describe information that should be documented.
10. Divide and define medical terms.
11. Use a medical dictionary.
12. Write nurses notes.

DOCUMENTING PATIENT CARE
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities

A. Order materials planned to supplement unit.

B. Make transparency.

C. Provide students with objective sheet.

D. Provide students with information and assignment sheets.

E. Discuss unit and specific objectives.

F. Discuss information and assignment sheets.

G. Develop appropriate learning activities for special needs students.

H. Play games to reinforce learning of medical terms.

EXAMPLES: Bingo, Concentration

I. Have students make crossword puzzles or word searches using common medical terminology.

(NOTE: Books are available that already have crossword puzzles and word searches for health occupations for almost every system and condition, from the Educational Services Division, American Journal of Nursing Company. For prices, write to American Journal of Nursing Company, 10 Columbus Circle, New York, New York 10019.)

J. Divide into teams and have a spelling bee, using medical terminology.

(NOTE: This practice will be good to use in practicing for the HOSA Spring Conference medical terminology competition.)

K. Provide medical dictionaries to assist in completing assignment sheets.

(NOTE: There may be differences in spelling of words depending on source. Use the spelling given from students' source.)

L. Obtain and provide your own format if different from the nurses notes sheet given to students in Assignment Sheet #3.

M. Ask the in-service director to provide an in-service class for your students if your facility uses the POMR and SOAP method of record keeping.

N. Provide nurses notes pulled from charts that you feel would be good and poor examples to show class.

O. Use following pages of suggested charting to teach descriptive note writing.

SUGGESTED ACTIVITIES

CHARTING TO TEACH DESCRIPTIVE NOTE WRITING

Concerning	Factors to be Charted	Suggested Terms to Use
Abdomen	1. Large and extends outward	1. Enlarged, protruding
	2. Black and blue marks present	2. Bruised
	3. Hard, boardlike	3. Hard, rigid
	4. Soft, flabby, fat	4. Relaxed, flaccid, flat
	5. Hurts when touched	5. Sensitive to touch, tender
	6. Appears swollen, rounded	6. Distended
	7. Presence of rash	7. Rash present (mild, severe)
	8. Filled with gas	8. Tympanites
	9. Scars present	9. Scarred
Amounts	1. Large amount	1. Profuse, copious, free, excessive measured amount
	2. Moderate amount	2. Moderate, usual measured amount
	3. Small amount	3. Small amount, scanty, slight, very little measured amount
Appearance, general	1. Thin and undernourished	1. Emaciated
	2. Fat, greatly overweight	2. Obese
	3. Very sick	3. Description of observable symptoms
	4. Not very sick	4. Description of observable symptoms
Appetite	1. Very fussy about food	1. Has definite likes and dislikes concerning food (explain what these are)
	2. Eats all food served	2. Appetite good
	3. Eats very little	3. Appetite poor
	4. Loss of appetite	4. Anorexia
	5. Abnormal craving for certain foods	5. Parorexia
	6. Refuses to eat	6. Refused food (state reason)
	7. Eats only small amount	7. Appetite fair
	8. Has desire to eat materials that are not food	8. Craves chalk, dirt, etc. (pica)
Arm	1. Shoulder to elbow	1. Upper arm (right or left)
	2. Elbow to wrist	2. Lower arm (right or left)
	3. With accumulation of fat	3. Plump
	4. Appear puffy or swollen	4. Edematous
	5. Right arm artificial	5. Artificial arm (rt)
Back (areas)	1. Upper back	1. Interscapular region, shoulder area
	2. Small of back	2. Lumbar region
	3. End of spine	3. Sacral region
	4. Gluteal area	4. Buttocks
	5. Humpback	5. Kyphosis
	6. Swayback	6. Lordosis

SUGGESTED ACTIVITIES

Concerning	Factors to be Charted	Suggested Terms to Use
Backrest	1. Backrest raised	1. Head of bed elevated (indicate angle, degree of)
Baths	1. Given when patient is admitted	1. Admission bath
	2. All-inclusive bath	2. Complete bath
	3. Including face, arms, back, axilla, genitals	3. Partial bath
	4. Special baths (treatment)	4. Name of the bath (sitz)
	5. Taken in tub	5. Tub bath
	6. Taken in bed, by patient	6. Self-administered
Belch	1. Belching	1. Eructation
Bleeding	1. Spurting of blood	1. In spurts
	2. Very little	2. Oozing
	3. Nosebleed	3. Epistaxis
	4. Blood in vomitus	4. Hematemesis
	5. Blood in urine	5. Hematuria
	6. Spitting of blood	6. Hemoptysis
	7. When bleeding is stopped	7. Hemorrhage controlled
Blister	1. Blister	1. Vesicle
Blood Pressure	1. Blood pressure 120/74	1. B.P. 120/74
B.M.R.	1. Basal metabolic rate	1. B.M.R.
Breast	1. Inflammation of	1. Mastitis
	2. Each of same size	2. Of equal size
	3. Satisfactory in appearance	3. Developed normally
	4. Nipple always depressed	4. Inverted nipple
Breath	1. Unpleasant	1. Halitosis
	2. Foul	2. Fetid
	3. With sweet, fruitlike odor	3. Fruity, sweet
	4. Alcoholic	4. Smells of alcohol
Breathing	1. Act of breathing	1. Respiration
	2. Act of inhaling	2. Inspiration
	3. Act of exhaling	3. Expiration
	4. Difficult breathing	4. Dyspnea
	5. Short periods when breathing ceases	5. Apnea
	6. Inability to breathe while lying down	6. Orthopnea
	7. Normal breathing	7. Eupnea
	8. Rapid breathing	8. Hyperpnea
	9. Large volume of air inspired	9. Deep breathing
	10. Small volume of air inspired	10. Shallow breathing
	11. Abnormal variations in rhythm	11. Irregular respiration
	12. Suffocation	12. Asphyxia

SUGGESTED ACTIVITIES

Concerning	Factors to be Charted	Suggested Terms to Use
Care	1. Wash face and hands, oral hygiene, bedpan	1. Early A.M. care
	2. Bath, backrub, bedpan, oral hygiene, care of hair and nails	2. Routine A.M. care
	3. Wash hands, face and back, backrub, bedpan, oral hygiene	3. P.M. care
	4. Special attention or treatment of mouth or back as ordered by doctor	4. Special care to (mouth, back)
Chest	1. Looks abnormally small	1. Shrunken
	2. Abnormally shaped	2. Deformed
	3. Hurts when moving or breathing	3. Pain on moving, pain on breathing
Chill	1. Chilling	1. Complains of (c/o)being chilled
	2. Severity (degree of)	2. Severe, moderate or slight
	3. Type or kind	3. Nervous, etc.
	4. Duration	4. Protracted, persistent, of short duration
	5. Came on suddenly	5. Sudden onset
Color	1. Colorless	1. Clear
	2. Of normal urine	2. Amber
	3. Resembling clay	3. Clay-colored
	4. Looks same as tar	4. Tarlike
	5. Tinged with blood	5. Blood-tinged
Coma	1. Partly in coma	1. Partially comatose
	2. In deep coma	2. Profound coma; does not respond to stimuli
Consciousness	1. Fully conscious, aware of surroundings	1. Alert, fully conscious
	2. Only partly conscious	2. Semiconscious
	3. Unconscious, but can be aroused	3. Comatose
Consistency	1. Retains its shape	1. Formed
	2. Watery	2. Liquid
	3. Thick, sticky or gluelike	3. Concentrated, tenacious
	4. Containing or resembling mucus	4. Mucoid
Convulsion	1. Continuous shaking	1. Tonic tremor
	2. Shaking with intervals of rest	2. Clonic tremor
	3. Began without warning	3. Sudden onset
	4. Spasm or convulsive seizure	4. Paroxysm
	5. Convulsive seizure with loss of consciousness	5. Grand mal seizure

SUGGESTED ACTIVITIES

Concerning	Factors to be Charted	Suggested Terms to Use
Cough	1. Coughs all the time	1. Continuous cough
	2. Coughing over long period of time	2. Persistent cough
	3. Coughs up material	3. Productive cough
	4. Occurring in spasms	4. Spasmodic cough
	5. Coughs quite often	5. Frequent cough
	6. Cough that does not produce material from lungs	6. Nonproductive cough
	7. With characteristic "whoop" on inspiration	7. Whooping cough
	8. Occurs in paroxysms or attacks	8. Paroxysmal cough
	9. Other self-explanatory terms used to describe a cough	9. Tight, loose, deep dry, hacking, harsh, painful, rasping explosive, exhaustive
Decay	1. Of teeth	1. Dental caries
	2. Of tissue	2. Necrosis
Defecation	1. Bowel movement (material), bowel movement (act of)	1. Feces, stool defecation
	2. Excessive defecation	2. Diarrhea
	3. Gray-colored stool	3. Clay-colored stool
	4. Dark brown liquid stool	4. Highly colored liquid stool
	5. Formed, yet soft stool	5. Soft-formed stool
	6. Formed with hardened feces	6. Hard-formed stool
Dizziness	1. Dizziness	1. Vertigo
Drainage	1. Watery, from nose	1. Coryza
	2. Containing pus	2. Purulent
	3. Bloody	3. Sanguineous
	4. Consists of feces	4. Fecal
	5. Of lymphatic fluid	5. Serous
	6. Contains mucus or pus	6. Mucopurulent
	7. Tough, sticky	7. Tenacious
	8. From vagina (after delivery)	8. Lochia
Dressings	1. A second dressing added to the first	1. Dressing reinforced
	2. Dressing removed, another applied	2. Dressing changed
	3. Drain tubes advanced	3. Drain tubes advanced (number of inches)
Ears	1. Wax in the ears	1. Cerumen
	2. Ringing in the ears	2. Tinnitus aurium
	3. Dizziness	3. Vertigo
	4. Abnormal in shape	4. Deformed
Emesis	1. Produced by effort of patient	1. Induced
	2. Ejected to few feet distant	2. Projectile
	3. If blood is only noticeable	3. Blood-tinged
	4. Agent given to produce emesis	4. Emetic

SUGGESTED ACTIVITIES

Concerning	Factors to be Charted	Suggested Terms to Use
Enemas	1. To induce bowel movement	1. Cleansing enema
	2. To supply nourishment	2. Nutritive enema
	3. To relieve distention caused by gas	3. Carminative enema
	4. To be retained for several hours	4. Retention enema
	5. To aid in fluoroscopy examination	5. Barium enema
Expectoration	1. A great deal	1. Profuse
	2. Very little	2. Scant
	3. Spitting up blood	3. Hemoptysis
Eyes	1. Sharpness of vision	1. Visual acuity
	2. Yellow in color	2. Jaundiced
	3. Puffy, swollen	3. Edematous
	4. Drooping of lids	4. Ptosis of lids
	5. Motionless, not moving, staring	5. Fixed
	6. Usually sensitive to light	6. Photophobia
	7. Double vision	7. Diplopia
	8. Squinting	8. Strabismus
	9. Abnormal protrusion of eyeball	9. Exophthalmos
	10. Inflammation of conjunctiva	10. Conjunctivitis
	11. Dilation of the pupil	11. Pupil dilated
	12. Contraction of the pupil	12. Pupil contracted
	13. Near-sightedness	13. Myopia
	14. Far-sightedness	14. Hyperopia
	15. Sees objects indistinctly	15. Blurred vision
	16. Other characteristic terms (self-explanatory)	16. Bright, clear, dull, inflamed, sunken, crossed, bloodshot, burning, smarting
	17. Stye on eyelid	17. Hordeolum
Face	1. Without color	1. Pale
	2. Pink	2. Flushed
	3. Broken out	3. Presence of rash, acne
	4. Black and blue	4. Bruised
	5. Characteristic expressions worn	5. (Describe)
	6. Marked with pits and scars	6. Pock-marked
Faint	1. Fainting	1. Syncope
Feet	1. Reddened spots or places caused by pressure or friction	1. Pressure areas present
	2. Puffy, enlarged, swollen	2. Swollen, edematous
	3. Warm, cold	3. Warm, cold
Fever	1. Without fever	1. Afebrile
	2. Fever, temperature above normal	2. Pyrexia
	3. Temperature greatly above normal	3. Hyperpyrexia
	4. Elevated temperature suddenly returning to normal	4. Crisis
	5. Elevated temperature gradually returning to normal	5. Lysis

SUGGESTED ACTIVITIES

Concerning	Factors to be Charted	Suggested Terms to Use
Fingers	1. Unusually long	1. Long
	2. Coming to fine point at end	2. Tapering
	3. Square across end	3. Clubbed
Gas	1. Gas in the digestive tract	1. Flatus
	2. Distention caused by accumulation of gas	2. Flatulence
Gums	1. Inflammation of gums	1. Gingivitis
	2. A gum boil	2. Parulis
	3. Pulling away from teeth	3. Receding, shrunken
	4. Bleed when pressure is applied	4. Bleeding
	5. Healthy-looking	5. Pink, firm
	6. Spongy	6. Spongy
Hair	1. Clean, good appearance	1. Clean, glossy
	2. Unclean, coarse	2. Greasy, coarse
	3. Uncombed, neglected	3. Tangled, neglected
	4. Not normal color	4. Bleached, dyed
Hallucination	1. Sensory stimulation without external stimuli	1. Hallucination
	2. Of hearing	2. Auditory hallucination
	3. Of sight	3. Visual hallucination
	4. Of smell	4. Olfactory hallucination
	5. Of taste	5. Gustatory hallucination
Hands	1. Dirty, rough, nails broken	1. (Describe appearance)
	2. Abnormally large	2. (Describe appearance)
	3. Fingers square in shape	3. (Describe appearance)
	4. Show good care	4. (Describe appearance)
	5. Wet, dry	5. (Describe appearance)
	6. Hot, cold	6. (Describe)
	7. Shaking continuously	7. (Describe appearance)
Head	1. Forehead	1. Frontal region
	2. Region over temple	2. Temporal region
	3. Back of head	3. Occipital region
	4. Base of skull	4. Basilar region
	5. Having a large head	5. Macrocephalous
	6. Having a small head	6. Microcephalous
Heartbeat	1. Irregularity of heartbeat	1. Arrhythmia
	2. Slowness of heartbeat	2. Bradycardia
	3. Fast heartbeat	3. Tachycardia
Hives	1. Hives	1. Urticaria
	2. Itching	2. Pruritis

SUGGESTED ACTIVITIES

Concerning	Factors to be Charted	Suggested Terms to Use
Joints	1. Bending	1. Flexion
	2. To straighten	2. Extension
	3. Turn downward	3. Pronation
	4. Turn upward	4. Supination
	5. Revolve around	5. Rotation
	6. Move away from median line	6. Abduction
	7. Move toward median line	7. Adduction
	8. A stiff joint	8. Ankylosis
	9. Inflammation of a joint	9. Arthritis
	10. Wrenching of a joint	10. Sprain
Leg (areas)	1. Thigh to knee	1. Upper leg
	2. Knee to ankle	2. Lower leg
Lice	1. Head, body, pubic	1. Pediculi
	2. Condition of lousiness	2. Pediculosis
Lips	1. Pale, colorless	1. Pale
	2. Blue in color	2. Cyanotic
	3. Presence of tiny cracks	3. Fissured, cracked
	4. Fever blisters present	4. Presence of herpes simplex
Lungs	1. Abnormal sounds in	1. Rales, wheezing, etc.
Medicine (administration of)	1. By mouth	1. Orally
	2. By rectum	2. Rectally
	3. Breathing in	3. Inhalation
	4. Rubbing into skin	4. Inunction
	5. Under the skin	5. Subcutaneous
	6. Within the skin	6. Intradermal
	7. Within muscle	7. Intramuscular
	8. Within the spinal canal	8. Intraspinal
	9. Within the vein	9. Intravenous
	10. Pouring into body cavity	10. Instillation
Memory	1. Loss of memory	1. Amnesia
Menstruation	1. If present when admitted	1. Menses present; menstruating
	2. If starts after admission	2. Menses begun
	3. Painful	3. Dysmenorrhea
	4. Total absence of	4. Amenorrhea
	5. Profuse or prolonged flow	5. Menorrhagia
	6. Occurring between periods	6. Metrorrhagia
	7. Cessation of	7. Menopause
Mental attitude	(NOTE: Do not appear judgmental or express your beliefs--describe behavior as accurately as possible--if needed state verbatim patient's words.)	

SUGGESTED ACTIVITIES

Concerning	Factors to be Charted	Suggested Terms to Use
Muscle	1. A wasting or diminution of	1. Atrophy
	2. Inflammation of	2. Myositis
	3. Stretching of	3. Strain
Nails	1. Blue in color	1. Cyanotic
	2. Other descriptive terms	2. Brittle, clean, torn, manicured
Nose	1. Nosebleed	1. Epistaxis
	2. Descriptive terms	2. Red, enlarged, deformed
	3. See Drainage	
Nourishment	1. Very small amount of fluid	1. Sips of fluid
	2. Small pieces of ice	2. Chipped ice
	3. Drink of water	3. Water (number of cc or ounces)
	4. Given through tube into stomach	4. Gavage
Odor	1. Like ammonia	1. Ammoniacal
	2. Like fruit	2. Fruity, sweet
	3. Very unpleasant	3. Offensive, foul
	4. Belonging to particular drug or other substance	4. Characteristic of (name of drug or substance)
Pain	1. Great pain	1. Severe
	2. Little	2. Slight
	3. Comes in seizures	3. Paroxysmal, spasmodic
	4. Spreads to distant areas	4. Radiating
	5. Started all at once	5. Sudden onset
	6. Hurts worse when moving	6. Increased by movement
	7. Other descriptive terms	7. Sharp, sudden, darting, gnawing, burning, stabbing, cramping, shooting, colicky, persistent, transient, constant, shifting, localized, deep, superficial
Paralysis	1. Of the muscles of the face	1. Facial
	2. Of the legs	2. Paraplegia
	3. Of one side of body	3. Hemiplegia
	4. Of a single limb	4. Monoplegia
Patient (Admission of)	1. Walking	1. Ambulatory
	2. Carried (infant)	2. In arms
	3. By wheelchair	3. Per wheelchair
	4. By stretcher	4. Per stretcher
	5. Had a bedsore when admitted	5. Decubitus present on admission
Patient (Dismissal of)	1. In much better condition	1. Condition improved
	2. No better than before	2. Condition unimproved
	3. No change in condition	3. Condition remains the same
	4. Was not dismissed by doctor, signed necessary papers	4. Signed own release

SUGGESTED ACTIVITIES

Concerning	Factors to be Charted	Suggested Terms to Use
Perspiration	1. Large amount	1. Profuse, excessive
	2. Small amount	2. Scanty
Physical examination	1. Examination by observation	1. Visual inspection
	2. Examination by listening to sounds	2. Auscultation
	3. Examination by handling	3. Manipulation
	4. Examination by palpating	4. Palpation
	5. Examination by striking	5. Percussion
	6. Examination by measuring	6. Mensuration
Positions	1. Flat on back, arms straight at sides	1. Horizontal
	2. On side, knees flexed	2. Lateral
	3. On left side, left arm behind back, right leg greatly flexed	3. Sims'
	4. Head elevated, knees flexed	4. Fowler's
	5. Knees flexed, head slightly elevated	5. Semi-Fowler's
	6. On back, buttocks near edge of table, knees well-flexed and separated	6. Lithotomy
	7. On back, knees flexed and apart, feet on table	7. Dorsal recumbent
	8. Resting on knees and chest	8. Knee-chest
	9. On back, pelvis higher than head	9. Trendelenburg
	10. On abdomen, face turned to one side	10. Prone
	11. Prone with hips over break in table and feet below level of the head	11. Jackknife
Pulse	1. Number of beats per minute	1. Rate
	2. Rhythm	2. Regular or irregular
	3. Beats missed at intervals	3. Intermittent
	4. Over 100 beats per minute	4. Rapid
	5. Very rapid, beats indistinct	5. Running
	6. A diminished rate	6. Infrequent
	7. Slow in rate	7. Slow
	8. One scarcely perceptible	8. Thready
	9. With excessive recoil wave	9. Dicrotic
	10. According to strength	10. Weak, strong
	11. Readily perceived (felt)	11. Perceptible
	12. Cannot be felt	12. Imperceptible
	13. Rapid, quite distinct beats	13. Pounding, bounding
Reproductive organs	1. External reproductive organs	1. Genitals (external)

SUGGESTED ACTIVITIES

Concerning	Factors to be Charted	Suggested Terms to Use
Respiration	1. Act of breathing	1. Respiration
	2. Above 25 respirations per minute	2. Accelerated
	3. Induced by artificial means	3. Artificial
	4. Snoring	4. Stertorous
	5. Difficult	5. Labored, dyspnea
	6. Respirations gradually increase in rapidity and volume, then gradually subside and cease entirely, then after 5-50 seconds begin again	6. Cheyne-Stokes
	7. Other descriptive terms	7. Quiet, sighing, gasping, rapid, shallow, deep, costal, audible, noisy
	8. Absent	8. Apnea
Restraint	1. Rails put on bed	1. Side rails in place
	2. Tied down with sheet	2. Sheet restraint applied
	3. Fastened to bed with ankle strap	3. Ankle restraint applied
Scalp	1. Covered with dandruff	1. Dandruff present
	2. Covered with scales	2. Scaly
	3. Lice found	3. Presence of pediculi
	4. Baldness	4. Alopecia
	5. Other descriptive terms	5. Dry, oily, itching
Sensation	1. Tingling	1. Tingling
	2. Of extreme heat, burning	2. Burning
	3. Stinging	3. Stinging
	4. Prickling	4. Prickling
Skin	1. Normal	1. Healthy
	2. Pink, hot	2. Flushed
	3. Blue in color	3. Cyanotic
	4. Very white	4. Extreme pallor, pale
	5. Shines	5. Glossy
	6. Raw surface	6. Excoriation
	7. Area where skin is rubbed off	7. Abrasion
	8. Yellow in color	8. Jaundiced
	9. Torn	9. Lacerated
	10. Cold and moist	10. Clammy
	11. Birthmark	11. Nevus, or nevi
	12. Wart	12. Verruca
	13. Boil	13. Furuncle
	14. Other descriptive terms	14. Mottled, discolored, moist, dry, hot, cold, warm, oily, broken, calloused, wrinkled tight, coarse, of fine texture, tanned

SUGGESTED ACTIVITIES

Concerning	Factors to be Charted	Suggested Terms to Use
Skin (Continued)	15. Indicate presence of	15. Rash, abrasion, laceration, insect bites, tumors, eruptions, acne, crusts, scars, ulcers, moles, abcess
	16. A discolored spot	16. Macule
	17. A pimple	17. Papule
	18. A blister	18. Vesicle
	19. A pimple filled with pus	19. Pustule
	20. Containing colored areas	20. Pigmented
	21. Wet	21. Moist
	22. Scraped	22. Abraded
	23. Small red spots on skin	23. Petechia
	24. Redness of	24. Erythema
	25. Hemorrhagic areas (bruises)	25. Ecchymosis
Sleep	1. Slept very little	1. Slept very little, slept at short intervals
	2. Tired when wakens	2. Awakens fatigued
	3. Moans while sleeping	3. Moaning; restless sleep
	4. Inability to sleep	4. Insomnia
Smoke	1. Smokes too much	1. Smokes excessively
Solution	1. Having same tension as that of blood	1. Isotonic
	2. Of greater tension	2. Hypertonic
	3. Of less tension	3. Hypotonic
Specimen	1. Sent to the laboratory	1. Specimen to laboratory (spec. to lab.)
Speech	1. Speaks normally	1. Normal speech
	2. Not understandable	2. Seems incoherent; difficult to understand
	3. Meaningless, wandering	3. Somewhat rambling
	4. Words run together	4. Slurring
	5. Stammering, stuttering	5. Stammering, stuttering
	6. Not heard distinctly	6. Inarticulate
	7. Speaks long and well	7. Fluent
	8. Difficulty in speaking	8. Dysphasia
	9. Unable to speak	9. Aphasia
Symptoms	1. Observed only by patient	1. Subjective
	2. Observed by someone other than the patient	2. Objective
	3. A group of symptoms	3. Syndrome
Taste	1. As expected, as usual	1. Normal
	2. Not able to taste normally	2. Disturbed
	3. Like metal	3. Metallic

SUGGESTED ACTIVITIES

Concerning	Factors to be Charted	Suggested Terms to Use
Teeth	1. False teeth	1. Dentures
	2. Decay of	2. Dental caries
	3. Other descriptive terms	3. Natural, notched, decayed, crooked, protruding, crowded, irregular, broken, loose
Throat	1. Difficulty in swallowing	1. Dysphagia
	2. Inability to swallow	2. Aphagia
	3. Other descriptive terms	3. Red, swollen, inflamed, irritated
Tongue	1. Descriptive terms	1. Pink, moist, dry, cracked, coated, raw, swollen, inflamed, ulcerated, scarred
Treatment	1. Preventive	1. Prophylactic
	2. Offering temporary relief	2. Palliative
Therapy	1. Water as therapeutic agent	1. Hydrotherapy
	2. Sunlight as therapeutic agent	2. Heliotherapy
	3. X-ray, radium as therapeutic agents	3. Radiotherapy
	4. Drugs as therapeutic agents	4. Chemotherapy
Unconsciousness	1. Complete unconsciousness	1. Comatose
	2. Partial unconsciousness	2. Stuporous
Urination	1. To urinate	1. Void, micturate
	2. No control over urination	2. Involuntary, incontinent
	3. Burning when voids	3. Burning sensation on micturation
	4. Large amount of urine voided	4. Diuresis
	5. Increased amount voided	5. Polyuria
	6. Frequent voiding at night	6. Nocturia
	7. Total suppression of urine	7. Anuria
	8. Painful urination	8. Dysuria
	9. Pus in urine	9. Pyuria
	10. Blood in urine	10. Hematuria
	11. Hemoglobin in urine	11. Hemoglobinuria
	12. Glucose in urine	12. Glucosuria
	13. Albumin in urine	13. Albuminuria
	14. Acetone in urine	14. Acetonuria
	15. Bile in urine	15. Choluria
	16. Scantiness of urine	16. Oliguria
	17. Sugar in the urine	17. Glycosuria
	18. Bedwetting	18. Enuresis
	19. Stones in urine	19. Calculi

SUGGESTED ACTIVITIES

Concerning	Factors to be Charted	Suggested Terms to Use
Vomit	1. Desire to do so (for various types, see Emesis)	1. Nausea
Weight	1. Overweight 2. Thin, underweight	1. Obese 2. Emaciated
Wounds	1. Deep 2. Slight, surface only 3. Not infected 4. Discharging pus 5. Infected 6. Torn	1. Deep 2. Superficial 3. Clean 4. Suppurating 5. Infected 6. Lacerated

SUGGESTED ACTIVITIES

P. Give test.

(NOTE: Because this test may be too long to give in one sitting, divide into parts and give only a few questions at one time.)

II. Instructional materials

A. Objective sheet

B. Suggested activities

C. Information sheet

D. Transparency Master: TM #1--Nurses Notes

E. Assignment sheets

1. Assignment Sheet #1--Divide and Define Medical Terms

2. Assignment Sheet #2--Use a Medical Dictionary

3. Assignment Sheet #3--Write Nurses Notes

F. Answers to assignment sheets

G. Test

H. Answers to test

III. Unit references

A. Bootay, Lynne Sandmeyer, et al. *Documenting Patient Care Responsibly*. Horsham, Pennsylvania: Nursing80 Books, Intermed Communications, Inc., 1980.

B. Fisher, J. Patrick. *Basic Medical Terminology*. Indianapolis, Indiana: Bobbs-Merrill Co., Inc., 1976.

C. Thomas, Clayton L., ed. *Taber's Cyclopedic Medical Dictionary*. Philadelphia: F. A. Davis Company, 1981.

DOCUMENTING PATIENT CARE
UNIT II

INFORMATION SHEET

I. Terms and definitions

A. Prefix--Beginning of a word, base, or phrase

B. Suffix--Ending of a word, base, or phrase

C. Pertinent charting--Documentation of only the more specific observations made in patient care

EXAMPLE: Left leg elevated to 40 degree angle. Cast in place, no noted drainage or swelling, toes pink and warm to touch.

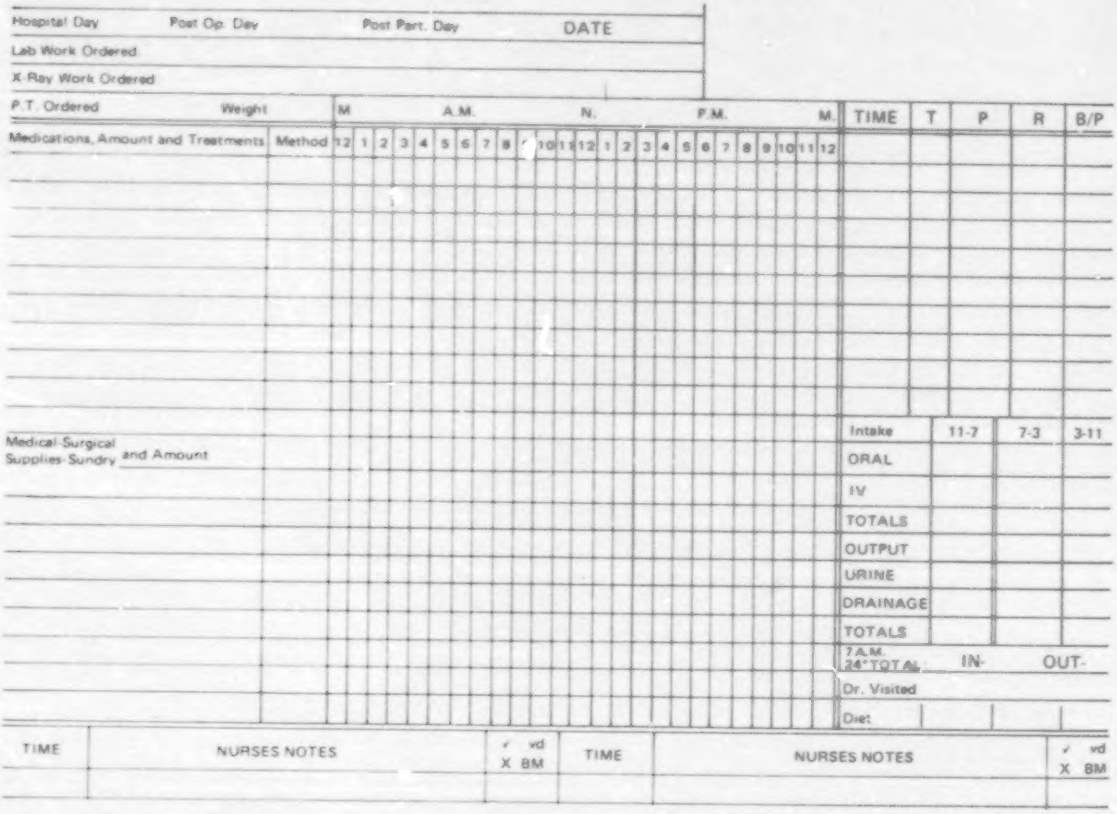
D. Descriptive charting--Documentation including all observations and procedures carried out

EXAMPLE: Complete bed bath given. Vital signs T.101 P.86 R. 18 B/P 140/90. Turned to left side. Completed cough and deep-breathe exercises

INFORMATION SHEET

E. Flow sheet--Type of format that can be used with pertinent charting to document daily types of procedures, functions, or observations

EXAMPLE:



Hospital Day Post Op. Day Post Part. Day DATE

Lab Work Ordered

X-Ray Work Ordered

P.T. Ordered Weight

M A.M. N. P.M. M.

Medications, Amount and Treatments | Method | 12 1 2 3 4 5 6 7 8 9 10 11 12 1 2 3 4 5 6 7 8 9 10 11 12

TIME | T | P | R | B/P

Medical-Surgical Supplies-Sundry and Amount

Intake | 11-7 | 7-3 | 3-11

ORAL

IV

TOTALS

OUTPUT

URINE

DRAINAGE

TOTALS

7 A.M. 24° TOTAL IN- OUT-

Dr. Visited

Diet

TIME | NURSES NOTES | ✓ vd X BM | TIME | NURSES NOTES | ✓ vd X BM

INFORMATION SHEET

F. Problem-oriented medical record (POMR)--Record developed and organized according to patient's specific health problem

(NOTE: This system requires special types of forms to write the progress notes. These are referred to as SOAP or SOAPIER notes and are written in a very organized manner. If this system is used in your facility, the in-service education department will hold classes on how to use this format.)

EXAMPLE: S--Subjective data

O--Objective data

A--Assessment

P--Plan

I--Implementation of plan

E--Evaluation of plan

R--Revision of plan if it was not effective

G. Source-oriented record system--System of record keeping where each professional group (the source) has its own form for documenting care of the patient

EXAMPLE: Doctor's orders, progress notes, laboratory, nurses notes

INFORMATION SHEET

H. Nurses notes--Sheets on which nursing staff document patient care, observations made, and other pertinent data

EXAMPLE:

TIME	NURSES NOTES	✓ vd X BM	TIME	NURSES NOTES	✓ vd X BM

II. Common prefixes used in health professions

A. A; an--Without; lack of

B. Ab--Away from

C. Ad--Toward

D. Adeno--Gland

E. Amnio; cyst--Sac

F. Angi; angio--Vessel

G. Ante--Before

H. Anti--Against

I. Antr--Chamber

INFORMATION SHEET

J. Apo--Detached

K. Arthro--Joint

L. Athero--Fatty-like tissue

M. Auto--Self

N. Axilla--Armpit

O. Bi--Two

P. Bio--Life

Q. Blast--Developing

R. Brady--Slow

S. Cap--Head

T. Carcin--Cancer

U. Cardio--Heart

V. Cerebr-cerebri-cerebro--Combining form denoting cerebrum, cerebral, brain

W. Cervico--Neck

X. Chole; cholecyst--Gallbladder

Y. Colo--Large intestine

Z. Contra--Against

AA. Craneo--Skull

III. Common prefixes and meanings

A. Chloro--Green

B. Cyan--Blue

C. Cyto--Cell

D. Derm; dermat; dermato--Skin

E. Dia--Across

F. Diplo--Double

G. Dis--Apart

H. Dys--Painful

I. Enceph--Brain

INFORMATION SHEET

J. Endo--Inside
K. Epi--Upon or after
L. Erythro--Red
M. Exo--Outside
N. Gastro--Stomach
O. Hemo; hema; hem; hemato--Blood
P. Hepato--Liver
Q. Histo--Tissue
R. Hydro--Water
S. Hyper--Excessive or above
T. Hypo--Under or below
U. Icter--Yellow
V. Inter--Between
W. Intra--Within or inside
X. Leuko--White
Y. Lipo--Fat
Z. Litho--Stone
AA. Mal--Bad or abnormal
BB. Masto; mammo--Breast
CC. Melano--Black
DD. Morpho--Shape or form
EE. Myo--Muscle
FF. Neo--New
GG. Nephro--Kidney
HH. Neuro--Nerve
II. Oligo--Small amount
JJ. Oophoro--Ovary
KK. Op; ophth; optic--Eye and vision

INFORMATION SHEET

LL. Orchi--Testicle

MM. Orth--Straight

NN. Osteo--Bone

OO. Oto; auri--Ear

PP. Para--Beside or near

QQ. Pedi--Child

RR. Peri--Around or surround

SS. Phleb(o)--Vein

TT. Phobia--Fear

UU. Physio--Nature

VV. Pleuro--Membranes of lungs

WW. Pneumo--Combining forms meaning air, lung

XX. Poly--Many or much

YY. Procto; recto--Rectum

ZZ. Pseudo--False

AAA. Psych--Mind

BBB. Pyelo--Combining form meaning the pelvis

CCC. Rhino--Nose

IV. Common suffixes used in medical terminology and their meanings (Assignment Sheets #1 and #2)

A. -algia--Pain

B. -centesis--Puncture of a cavity

C. -cyte--Cell

D. -ectomy--Removal of

E. -emia--Condition of the blood

F. -gram; -graph--Picture or recording

G. -itis--Inflammation

H. -ist--Specialist

INFORMATION SHEET

I. -megaly--Enlargement

J. -natal--Birth

K. -oid--Resembling

L. -ology--Study of

M. -orrhea--Flow or discharge

N. -oma--Tumor

O. -osis--Condition of

P. -ostomy--A new opening

Q. -otomy--Cutting into

R. -penia--Decrease

S. -plasty--Shape or repair

T. -ptosis--Falling or dropping

U. -rrhagia--Breaking or bursting

V. -rrhaphy--Suture or sew

W. -scope--Lighted instrument for examining

X. stasis--To control or stop

Y. -trophy--Nutrition, growth

Z. -uria--Urine

V. Reasons for documenting patient care

A. To provide information needed to plan patient care and keep care consistent

B. To provide a legal record that can be used to protect the patient, hospital, and health care providers

(NOTE: ALWAYS think carefully before you write information in a patient's chart. Something seemingly simple and clear to you may be misleading or could be misconstrued in a court of law.)

C. To provide a way to evaluate, review, and study the patient's care in preparation for an audit

D. To furnish written evidence of why the patient received care given, what type of response was made, and what changes were made to meet the patient's needs

E. To provide information for research and education

INFORMATION SHEET

VI. Basic guidelines to follow when writing nurses notes (Transparency #1; Assignment Sheet #3)

(NOTE: These guidelines are basic to almost any facility. If there are differences, follow your hospital's policy and procedure guide. Do not chart if you are unsure of the format used.)

A. Make sure all recording is legible, both printed and written

B. Use only the color of ink specified by your institution

(NOTE: DO NOT use a felt tip pen, as it will not microfilm correctly and can be quite messy. Many hospitals use different ink colors for the various shifts.)

C. Sign each entry with your first initial or name, last name, and title

(NOTE: Each entry in the nurses notes must be signed by the individual writing the notes. If you make a series of notes, each statement does not have to be signed, but the signature must go at the end. This may cause problems if someone else enters notes before you can sign your name and title.)

D. Keep all recordings within the limits provided by the page ruling

E. Write the current date on each record

F. Use *only* the accepted abbreviations and symbols used in your facility

(NOTE: You may use BRP for one term, but others may use another abbreviation.)

G. Make sure that you are writing on the correct patient's chart

(NOTE: Check the outside of the chart and the top of each form that you are filling out. It is easy for the wrong page to be slipped into the wrong chart.)

H. DO NOT leave blank lines in your notes

I. Number of entries will depend on the condition of the patient, legal purposes, and the necessity of communicating with the physician and nursing staff

J. State patient's needs, problems, and the nursing interventions in clear, simple terminology

K. DO NOT begin the entry with "patient," as it is his or her chart and would be redundant

EXAMPLE: "Assisted to bedside commode," instead of "patient assisted to bedside commode"

L. Document any procedures that were not completed, giving reasons and pertinent data

INFORMATION SHEET

M. Put quotation marks around the exact words spoken by the patient if pertinent in that patient's care

EXAMPLE: "I don't want to take that yellow pill, it makes me sick at my stomach."

N. Write the correct time in the place provided, NEVER chart an entry until the procedure or encounter takes place

O. Record information in chronological order if possible

(NOTE: If necessary indicate late entries using facility's format.)

VII. Ways to avoid common problems in documenting patient care

A. Eliminate words that make you sound unsure

1. State only facts
2. Use only accepted medical terminology

   (NOTE: If you are not sure of a medical term, use a medical dictionary to find the meaning. If you use a wrong term, it could be disastrous and could result in misunderstandings between health care providers.)

3. DO NOT use terms like "appears" or "seems to be"

B. Avoid terms that could be interpreted in more than one way

1. DO NOT use terms such as "good," "normal," "worse," or "sufficient"

   EXAMPLE: "Good day" or "Good eight hours"

2. Use terms and measurements that are specific

   EXAMPLE: If you are charting urine output, be sure to add the exact measurement, such as urine output, 750 ml/cc. This is added insurance that others will know exactly if that quantity is sufficient for that particular patient and his or her condition.

C. Write consistent nursing notes

1. Individualize your nurses notes just as you do care plans

   (NOTE : You may have two patients with conditions of cholelithiasis with elective cholecystectomy. There are certain expected observations and procedures to look for and to chart; but the patients could be several days apart in post-op recovery, each responding in his or her own way.)

2. NEVER chart before the care is given

INFORMATION SHEET

D. Avoid meaningless charting that wastes your time and benefits no one

1. DO NOT repeat meaningless words, even though your hospital policy may require you to chart within certain time limits

   (NOTE: Go back and look at the information about the patient; find out if there is some data you have missed or that needs further follow-up.)

2. DO NOT chart procedures or treatments that were never carried out

VIII. Order of steps used to make corrections in nurses notes

(NOTE: This method is standard in most hospitals. Follow your policy and procedure manual if there are differences in your facility.)

A. Recognize an error as soon as possible

(NOTE: Recheck frequently to make sure you have the right chart, right patient, and the right information.)

B. Mark through the error with only one line; do not erase or use correction fluid

C. Use the proper accepted format for denoting that a correction was made

D. Record the notation correctly

E. Sign the corrected information

IX. Information that should be documented

A. Admission information

1. Time and date
2. Method of admission
3. Initial vital signs, symptoms, condition of patient, any pertinent observations
4. Allergies and sensitivities
5. Specimens, type collected
6. Valuables and medications brought with patient and how they were cared for
7. Other data as needed

INFORMATION SHEET

B. Changes in the patient's condition

1. Changes in vital signs, symptoms, problems encountered

2. Laboratory reports and what was done to follow-up information

   EXAMPLE: If laboratory report came back with significant information, this should be noted and whether or not the physician or supervisory personnel was notified should be noted.

C. Specific treatments

1. Type of treatment

2. Response of patient

   EXAMPLES: Dressings, oxygen administration, IV therapy, enemas, special diet therapy

D. Medications

1. Specific information on method and site of administration, especially if IM, Sub-Q, intradermal, or IV

2. Patient's response to medication

3. Reason for medication if not routine order

4. Reasons for medications not given

E. Diagnostic tests

1. Those performed on the nursing unit

2. Whether or not patient went to another area for tests

F. Safety precautions

1. Any precautions that were utilized to keep patient or others safe

   EXAMPLES: Side rails up, bed placed in lowest position, restraints used

   (NOTE: Hopefully, it is a last measure to try to restrain a patient; but if necessary, the procedure should be documented as to why, how, the response, and that the physician was notified.)

2. Frequent notations if this is a type of restraint or safety measure used for security reasons

   (NOTE: Check frequently and document patient's response and condition.)

INFORMATION SHEET

G. Response of patient and/or family to specific teaching

1. Teaching activity

2. Patient's and/or family's response

3. Documentation of patient's and/or family's ability to carry out procedure on own

H. Transfer and discharge summaries

1. Progress and treatment of patient

   (NOTE: This should be noted before transferring or discharging patient.)

2. Current status of patient's condition

3. Any instructions given to institution where patient will be transferred, or, if patient is to be discharged, instructions to patient and family

4. Type of transportation used and who accompanied patient

5. Patient's instructions for self care, and verbalization that patient understood the directions

I. Expiration summary

1. Time respirations and other vital signs cease

2. Condition of body

3. Notification of physician

4. Family present or notified

5. Disposition of valuables and clothing

6. Notification of specific mortuary or morgue

   (NOTE: If autopsy is to be done, note if permission form was signed by the appropriate person.)

Nurses Notes

Hospital Day Post Op. Day Post Part. Day DATE

PATIENT INFORMATION

Lab Work Ordered:

X-Ray Work Ordered:

P.T. Ordered	Weight	M						A.M.						N.					P.M.							M.	TIME	T	P	R	B/P
Medications, Amount and Treatments	Method	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12					
Medical-Surgical Supplies-Sundry	and Amount																														

Intake	11-7	7-3	3-11
ORAL			
IV			
TOTALS			
OUTPUT			
URINE			
DRAINAGE			
TOTALS			
7 A.M. 24° TOTAL:	IN-		OUT-
Dr. Visited			
Diet			

TIME	NURSES NOTES	✓ vd X BM	TIME	NURSES NOTES	✓ vd X BM

DOCUMENTING PATIENT CARE
UNIT II

ASSIGNMENT SHEET #1--DIVIDE AND DEFINE MEDICAL TERMS

NAME ______________________________ SCORE ____________________

Breaking up medical terms makes them easier to understand, spell, and write. If you know the meanings of the prefixes and suffixes you will be able to define the entire term. Use the list below to write word parts, their meanings, and then the definition. Hand in to your instructor for evaluation.

EXAMPLE:

WORD	WORD PARTS	MEANING	DEFINITION
Ophthalmoscope	Opthalm(o)	eye	A lighted viewing tool made to examine the eye
	scope	lighted viewing tool	

	WORD	WORD PARTS	MEANING	DEFINITION
A.	Histology	______________	______________	______________
		______________	______________	______________
B.	Leukemia	______________	______________	______________
		______________	______________	______________
C.	Dermatologist	______________	______________	______________
		______________	______________	______________
D.	Hepatitis	______________	______________	______________
		______________	______________	______________
E.	Tracheotomy	______________	______________	______________
		______________	______________	______________
F.	Colostomy	______________	______________	______________
		______________	______________	______________
G.	Intradermal	______________	______________	______________
		______________	______________	______________
H.	Mammoplasty	______________	______________	______________
		______________	______________	______________

ASSIGNMENT SHEET #1

	WORD	WORD PARTS	MEANING	DEFINITION
I.	Anuria			
J.	Neurology			
K.	Hypodermic			
L.	Lipoma			
M.	Hemostasis			

DOCUMENTING PATIENT CARE
UNIT II

ASSIGNMENT SHEET #2--USE A MEDICAL DICTIONARY

NAME ______________________________ SCORE ________________

You will always need to keep a dictionary handy for quick reference. Know how to use the dictionary to help you learn how to pronounce, spell, and learn the meanings of medical terms. Using the list of words below, look up the words, break them into word parts, and give the meaning for the words. Then work with a classmate to see if you can spell the word correctly.

	WORD	WORD PARTS	MEANING
A.	Myelitis		
B.	Oliguresis		
C.	Fibromatosis		
D.	Gastrectomy		
E.	Hydroma		
F.	Spermatoblast		
G.	Psychocatharsis		
H.	Cardiostenosis		
I.	Cytophagocytosis		
J.	Nephroma		

ASSIGNMENT SHEET #2

	WORD	WORD PARTS	MEANING
K.	Salpingotomy		
L.	Osteosis		
M.	Hydrocephalus		
N.	Laryngopharyngitis		
O.	Pericarditis		
P.	Cholecystectomy		
Q.	Nephrolithiasis		
R.	Supralumbar		
S.	Pathologist		
T.	Diplopia		
U.	Intercellular		
V.	Pneumoencephalography		
W.	Glycosuria		
X.	Histocyte		

DOCUMENTING PATIENT CARE
UNIT II

ASSIGNMENT SHEET #3--WRITE NURSES NOTES

NAME ______________________________ SCORE ____________________

Learning to write good nurses notes takes much practice. Your ability and expertise will depend on your scientific knowledge, mastery of good grammar, and an understanding of medical terminology. In this assignment sheet you will be given a case study in Part I to develop your own nurses notes. In Part II you will practice writing nurses notes based on the care that you have given to two patients. Hand both parts in to your instructor for evaluation.

CASE STUDY FOR PART I

Suppose your patient for four hours was Mrs. Landry in room 410. She is a patient of Dr. Standard and is three days post-op with acute appendicitis and emergency appendectomy. Mrs. Landry is 38 years old, works as an editor for a publishing firm, is married, and has two small children. This is her first surgery and her post-operative period has been uncomplicated. From this information, develop nurses notes as you should if you had cared for Mrs. Landry. Consider every part of her nursing care as you develop your notes. Write notes covering these areas plus any others that you might include.

Hygiene
Ambulation
Vital signs
Bowel and bladder functions
Dressings and appearance of incision
Diet
Physician's visit
Family visit
Mental status
Overall physical status
Problems encountered
Other concerns

(NOTE: Be as descriptive as possible in your first charting. This is a fictitious patient, but a real condition and surgical procedure that happens frequently. You may want to use resource texts to research this condition before you write out your nurses notes.)

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ASSIGNMENT SHEET #3

PART I

Hospital Day Post Op. Day Post Part. Day DATE
Lab Work Ordered:
X-Ray Work Ordered:

Landry, Joan M
Room 410 Dr. Standard

#389420

P.T. Ordered	Weight	M					A.M.						N.						P.M.						M.
Medications, Amount and Treatments	Method	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Medical-Surgical Supplies-Sundry and Amount																										

TIME	T	P	R	B/P

Intake	11-7	7-3	3-11
ORAL			
IV			
TOTALS			
OUTPUT			
URINE			
DRAINAGE			
TOTALS			
7 A.M. 24° TOTAL:	IN-	OUT-	
Dr. Visited			
Diet			

TIME	NURSES NOTES	✓ vd X BM	TIME	NURSES NOTES	✓ vd X BM

ASSIGNMENT SHEET #3

Landry, Joan M
Room 410 Dr. Standard

#389420

Hospital Day Post Op. Day Post Part. Day DATE

Lab Work Ordered:

X-Ray Work Ordered:

P.T. Ordered Weight

		M					A.M.							N.						P.M.						M.
Medications Amount and Treatments	Method	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Medical-Surgical Supplies-Sundry and Amount																										

TIME	T	P	R	B/P

Intake	11-7	7-3	3-11
ORAL			
IV			
TOTALS			
OUTPUT			
URINE			
DRAINAGE			
TOTALS			

7 A.M. 24° TOTAL: IN- OUT-

Dr. Visited

Diet

TIME	NURSES NOTES	✓ vd X BM	TIME	NURSES NOTES	✓ vd X BM

ASSIGNMENT SHEET #3

PART II

Write nurses notes using the care plan that you developed and used in giving care to two patients to develop the next part of the assignment sheet. Two sets of nurses notes are provided for you.

Patient #1

Hospital Day Post Op. Day Post Part. Day DATE

Lab Work Ordered:

X-Ray Work Ordered:

P.T. Ordered	Weight	M					A.M.							N.						P.M.						M.
Medications, Amount and Treatments	Method	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Medical-Surgical Supplies-Sundry and Amount																										

TIME	T	P	R	B/P

Intake	11-7	7-3	3-11
ORAL			
IV			
TOTALS			
OUTPUT			
URINE			
DRAINAGE			
TOTALS			
7 A.M. 24° TOTAL:	IN-		OUT-
Dr. Visited			
Diet			

TIME	NURSES NOTES	✓ vd X BM	TIME	NURSES NOTES	✓ vd X BM

ASSIGNMENT SHEET #3

Hospital Day Post Op. Day Post Part. Day DATE

Patient #1

Lab Work Ordered:

X-Ray Work Ordered:

P.T. Ordered Weight

		M						A.M.						N.						P.M.						M.
Medications, Amount and Treatments	Method	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Medical-Surgical Supplies-Sundry and Amount																										

TIME	T	P	R	B/P

Intake	11-7	7-3	3-11
ORAL			
IV			
TOTALS			
OUTPUT			
URINE			
DRAINAGE			
TOTALS			

7 A.M. 24° TOTAL: IN- OUT-

Dr. Visited

Diet

TIME	NURSES NOTES	✓ vd X BM	TIME	NURSES NOTES	✓ vd X BM

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ASSIGNMENT SHEET #3

Patient #2

Hospital Day Post Op. Day Post Part. Day DATE

Lab Work Ordered:

X-Ray Work Ordered:

P.T. Ordered Weight

Medications, Amount and Treatments	Method	M					A.M.							N.						P.M.					M.	TIME	T	P	R	B/P
		12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12				

Medical-Surgical Supplies-Sundry and Amount

Intake	11-7	7-3	3-11
ORAL			
IV			
TOTALS			
OUTPUT			
URINE			
DRAINAGE			
TOTALS			

7 A.M. 24° TOTAL: IN- OUT-

Dr. Visited

Diet

TIME	NURSES NOTES	✓ vd X BM	TIME	NURSES NOTES	✓ vd X BM

PN II - 109-A

ASSIGNMENT SHEET #3

Hospital Day Post Op. Day Post Part. Day DATE

Patient #2

Lab Work Ordered:

X-Ray Work Ordered:

P.T. Ordered Weight

		M						A.M.						N.						P.M.						M.
Medications, Amount and Treatments	Method	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
Medical-Surgical Supplies-Sundry and Amount																										

TIME	T	P	R	B/P

Intake	11-7	7-3	3-11
ORAL			
IV			
TOTALS			
OUTPUT			
URINE			
DRAINAGE			
TOTALS			
7 A.M. 24° TOTAL:	IN-		OUT-
Dr. Visited			
Diet			

TIME	NURSES NOTES	✓ vd X BM	TIME	NURSES NOTES	✓ vd X BM

DOCUMENTING PATIENT CARE
UNIT II

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

	WORD PARTS	MEANING	DEFINITION
A.	hist ology	tissue study of	Study of tissue
B.	leuk emia	white condition	Condition of white blood cells
C.	derma tolog(ist)	skin specialist	Specialist who deals with conditions of the skin
D.	hepat itis	liver inflammation	Inflammation of the liver
E.	trache otomy	trachea incision into	Incision into the trachea
F.	colo ostomy	large intestine a new opening	A new opening into the large intestine
G.	intra dermal	within skin	Within the skin
H.	mammo plasty	breast shape or repair	Shaping or repairing of breast
I.	an uria	without, lack of urine	Lack of urine
J.	neuro ology	nerve study of	Study of the nerves
K.	hypo dermic	under skin	Under the skin
L.	lipo oma	fat tumor	Tumor composed of fat
M.	hemo stasis	blood stop or control	Stop or control blood

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #2

	WORD PARTS	MEANING
A.	myelos/itis	marrow inflammation
B.	olig/uresis	small amount or infrequent urination
C.	fibra/oma/osis	fiber tumor condition
D.	gaster/ektome	excision of belly
E.	hydro/oma	water tumor
F.	spermatos/blastos	seed germ (spermatozoa)
G.	psyche/katharsis	mind purging
H.	cardio/stenosis	heart narrowing
I.	cyto/phagein/kytos/osis	cells eating other cells
J.	nephro/oma	kidney tumor
K.	salpingx/tome	tube cutting
L.	osteo/osis	bone condition
M.	hydro/cephale	water head
N.	laryngo/pharynx/itis	larynx and pharynx inflammation
O.	peri/cardia/itis	around heart inflammation
P.	chole/cyst/ectomy	bile bladder excision of (removal of gallbladder)
Q.	nephro/lithiasis	kidney calculi (stones)
R.	supra/lumbar	above lumbar
S.	pathos/logos	disease study
T.	diplous/ope	double sight
U.	inter/cellular	between cells
V.	pneumo/encephalo/graphy	air head to write (x-ray exam of head following the introduction of air)
W.	glycos/uria	sweet urine
X.	histos/cytos	tissue cell

Assignment Sheet #3--Evaluated to the satisfaction of the instructor

DOCUMENTING PATIENT CARE
UNIT II

TEST

NAME ______________________ SCORE ______________

1. Match terms associated with documenting patient care to their correct definitions. Write the correct numbers in the blanks.

   _____ a. Type of format that can be used with pertinent charting to document daily types of procedures, functions, or observations

   _____ b. Beginning of a word, base, or phrase

   _____ c. Record developed and organized according to patient's specific health problem

   _____ d. Ending of a word, base, or phrase

   _____ e. Sheets on which nursing staff document patient care, observations made, and other pertinent data

   _____ f. Documentation including all observations and procedures carried out

   _____ g. System of record keeping where each professional group (the source) has its own form for documenting the care of the patient

   _____ h. Documentation of only the more specific observations made in patient care

   1. Suffix
   2. Flow sheet
   3. Descriptive charting
   4. Prefix
   5. Nurses notes
   6. Problem-oriented medical record (POMR)
   7. Source-oriented record system
   8. Pertinent charting

2. Write the meanings for each of the following common prefixes used in health professions.

   a. Cap-- ______________________

   b. Bi-- ______________________

   c. Anti-- ______________________

   d. Chole; cholecyst-- ______________________

   e. Ab-- ______________________

   f. Craneo-- ______________________

   g. Brady-- ______________________

   h. Angi; angio-- ______________________

TEST

i. Ad-- ____________________

j. A; an-- ____________________

k. Antr-- ____________________

l. Amnio; cyst-- ____________________

m. Colo-- ____________________

n. Athero-- ____________________

o. Axilla-- ____________________

p. Ante-- ____________________

q. Adeno-- ____________________

r. Bio-- ____________________

s. Auto-- ____________________

t. Apo-- ____________________

u. Blast-- ____________________

v. Carcin-- ____________________

w. Cervico-- ____________________

x. Cardio-- ____________________

y. Contra-- ____________________

z. Arthro-- ____________________

aa. Cerebr-cerebri-cerebo-- ____________________

3. Match common prefixes to their correct meanings. Write the correct numbers in the blanks.

_____a. Skin
_____b. Blue
_____c. Double
_____d. Apart
_____e. Green
_____f. Across
_____g. Cell

1. Chloro
2. Cyan
3. Cyto
4. Derm; dermat; dermato
5. Dia
6. Diplo
7. Dis

TEST

______ h. Fat
______ i. Painful
______ j. Stomach
______ k. Excessive or above
______ l. Stone
______ m. Inside
______ n. Red
______ o. Blood
______ p. Breast
______ q. Liver
______ r. New
______ s. Kidney
______ t. Nerve
______ u. Muscle
______ v. Brain
______ w. Between
______ x. Upon or after
______ y. Water
______ z. Under or below
______ aa. White
______ bb. Small amount
______ cc. Black
______ dd. Outside
______ ee. Yellow
______ ff. Within or inside
______ gg. Tissue
______ hh. Bad or abnormal
______ ii. Shape or form

8. Dys
9. Enceph
10. Endo
11. Epi
12. Erythro
13. Exo
14. Gastro
15. Hemo; hema; hem; hemato
16. Hepato
17. Histo
18. Hydro
19. Hyper
20. Hypo
21. Icter
22. Inter
23. Intra
24. Leuko
25. Lipo
26. Litho
27. Mal
28. Masto; mammo
29. Melano
30. Morpho
31. Myo
32. Neo
33. Nephro
34. Neuro
35. Oligo

TEST

_____jj. Eye and vision
_____kk. Ovary
_____ll. Bone
____mm. Straight
_____nn. Testicle
_____oo. Fear
_____pp. Membranes of lungs
_____qq. Vein
_____rr. Ear
_____ss. Many or much
_____tt. Around or surround
_____uu. Nose
_____vv. Rectum
____ww. Beside or near
_____xx. False
_____yy. Child
_____zz. Nature
____aaa. Combining forms meaning air, lung
____bbb. Mind
____ccc. Combining form meaning the pelvis

36. Oophoro
37. Op; ophth; optic
38. Orchi
39. Orth
40. Osteo
41. Oto; auri
42. Para
43. Pedi
44. Peri
45. Phleb(o)
46. Phobia
47. Physio
48. Pleuro
49. Pneumo
50. Poly
51. Procto; recto
52. Pseudo
53. Psych
54. Pyelo
55. Rhino

4. Write the meanings of the following common suffixes used in medical terminology.

a. -ostomy-- ________________________________
b. -plasty-- ________________________________
c. -trophy-- ________________________________
d. -orrhea-- ________________________________
e. -itis-- ________________________________
f. -uria-- ________________________________
g. -algia-- ________________________________

TEST

h. -ectomy-- ____________________

i. -penia-- ____________________

j. -stasis-- ____________________

k. -ptosis-- ____________________

l. -cyte-- ____________________

m. -emia-- ____________________

n. -scope-- ____________________

o. -rrhagia-- ____________________

p. -otomy-- ____________________

q. -ology-- ____________________

r. -megaly-- ____________________

s. -centesis-- ____________________

t. -gram; graph-- ____________________

u. -ist-- ____________________

v. -natal-- ____________________

w. -oid-- ____________________

x. -oma-- ____________________

y. -osis-- ____________________

z. -rrhaphy-- ____________________

5. Select from the following list reasons for documenting patient care. Mark each correct answer with an "X."

_____ a. To provide information needed to plan patient care and keep care consistent

_____ b. To provide a way to evaluate, review, and study the patient's care in preparation for an audit

_____ c. To provide purchasing with a statement to be used in billing patients for hospital supplies

_____ d. To provide dietary with an ongoing record of dietary needs

TEST

______e. To provide a legal record that can be used to protect the patient, hospital, and health care providers

______f. To furnish written evidence of why the patient received care given, what type of response was made, and what changes were made to meet the patient's needs

______g. To provide information for research and education

6. State basic guidelines to follow when writing nurses notes.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

f. ____________________

g. ____________________

h. ____________________

i. ____________________

j. ____________________

k. ____________________

l. ____________________

m. ____________________

n. ____________________

o. ____________________

7. Describe ways to avoid common problems in documenting patient care.

a. Eliminate words that make you sound unsure--____________________

____

____

____

TEST

b. Avoid terms that could be interpreted in more than one way--________________

c. Write consistent nursing notes--________________

d. Avoid meaningless charting that wastes your time and benefits no one--________________

8. Arrange in order steps used to make corrections in nurses notes. Write a "1" before the first step, a "2" before the second step, and so on in the blanks.

_____a. Sign the corrected information

_____b. Mark through the error with only one line; do not erase or use correction fluid

_____c. Record the notation correctly

_____d. Recognize an error as soon as possible

_____e. Use the proper accepted format for denoting that a correction was made

9. Describe information that should be documented.

a. Admission information--________________

TEST

b. Changes in the patient's condition--______________________________

____

____

c. Specific treatments--______________________________

____

____

d. Medications-- ______________________________

____

____

____

____

e. Diagnostic te[illegible]______________________________

____

____

f. Safety precautions--______________________________

____

____

____

g. Response of patient and/or family to specific teaching--____________

____

____

____

h. Transfer and discharge summaries--______________________________

____

____

____

____

TEST

i. Expiration summary--______________________________

____

____

____

____

____

____

____

(NOTE: Test questions 10-12 are assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

10. Divide and define medical terms.
11. Use a medical dictionary.
12. Write nurses notes.

DOCUMENTING PATIENT CARE
UNIT II

ANSWERS TO TEST

1.	a.	2	e.	5
	b.	4	f.	3
	c.	6	g.	7
	d.	1	h.	8

2.	a.	Head	o.	Armpit
	b.	Two	p.	Before
	c.	Against	q.	Gland
	d.	Gallbladder	r.	Life
	e.	Away from	s.	Self
	f.	Skull	t.	Detached
	g.	Slow	u.	Developing
	h.	Vessel	v.	Cancer
	i.	Toward	w.	Neck
	j.	Without; lack of	x.	Heart
	k.	Chamber	y.	Against
	l.	Sac	z.	Joint
	m.	Large intestine	aa.	Combining form denoting cerebrum, cerebral, brain
	n.	Fatty-like tissue		

3.	a.	4	i.	8	q.	16	y.	18
	b.	2	j.	14	r.	32	z.	20
	c.	6	k.	19	s.	33	aa.	24
	d.	7	l.	26	t.	34	bb.	35
	e.	1	m.	10, 23	u.	31	cc.	29
	f.	5	n.	12	v.	9	dd.	13
	g.	3	o.	15	w.	22	ee.	21
	h.	25	p.	28	x.	11	ff.	23, 10

ANSWERS TO TEST

gg.	17	mm.	39	ss.	50	yy.	43
hh.	27	nn.	38	tt.	44	zz.	47
ii.	30	oo.	46	uu.	55	aaa.	49
jj.	37	pp.	48	vv.	51	bbb.	53
kk.	36	qq.	45	ww.	42	ccc.	54
ll.	40	rr.	41	xx.	52		

4. a. A new opening
 b. Shape or repair
 c. Nutrition, growth
 d. Flow or discharge
 e. Inflammation
 f. Urine
 g. Pain
 h. Removal of
 i. Decrease
 j. To control or stop
 k. Falling or dropping
 l. Cell
 m. Condition of the blood
 n. Lighted instrument for examining
 o. Breaking or bursting
 p. Cutting into
 q. Study of
 r. Enlargement
 s. Puncture of a cavity
 t. Picture or recording
 u. Specialist
 v. Birth
 w. Resembling
 x. Tumor
 y. Condition of
 z. Suture or sew

5. a, b, e, f, g

6. a. Make sure all recording is legible, both printed and written
 b. Use only the color of ink specified by your institution
 c. Sign each entry with your first initial or name, last name, and title
 d. Keep all recordings within the limits provided by the page ruling
 e. Write the current date on each record
 f. Use *only* the accepted abbreviations and symbols used in your facility
 g. Make sure that you are writing on the correct patient's chart
 h. DO NOT leave blank lines in your notes

ANSWERS TO TEST

i. Number of entries will depend on the condition of the patient, legal purposes, and the necessity of communicating with the physician and nursing staff

j. State patient's needs, problems, and the nursing interventions in clear, simple terminology

k. DO NOT begin the entry with "patient," as it is his or her chart and would be redundant

l. Document any procedures that were not completed, giving reasons and pertinent data

m. Put quotation marks around the exact words spoken by the patient if pertinent in that patient's care

n. Write the correct time in the place provided, NEVER chart an entry until the procedure or encounter takes place

o. Record information in chronological order if possible

7. Description should include

   a. Eliminate words that make you sound unsure--

      1) State only facts

      2) Use only accepted medical terminology

      3) DO NOT use terms like "appears" or "seems to be"

   b. Avoid terms that could be interpreted in more than one way--

      1) DO NOT use terms such as "good," "normal," "better," "worse," or "sufficient"

      2) Use terms and measurements that are specific

   c. Write consistent nursing notes--

      1) Individualize your nurses notes just as you do care plans

      2) NEVER chart before the care is given

   d. Avoid meaningless charting that wastes your time and benefits no one--

      1) DO NOT repeat meaningless words, even though your hospital policy may require you to chart within certain time limits

      2) DO NOT chart procedures or treatments that were never carried out

8. a. 5
   b. 2
   c. 4
   d. 1
   e. 3

ANSWERS TO TEST

9. Description should include

   a. Admission information--

      1) Time and date

      2) Method of admission

      3) Initial vital signs, symptoms, condition of patient, any pertinent observations

      4) Allergies and sensitivities

      5) Specimens, type collected

      6) Valuables and medications brought with patient and how they were cared for

      7) Other data as needed

   b. Changes in the patient's condition--

      1) Changes in vital signs, symptoms, problems encountered

      2) Laboratory reports and what was done to follow-up information

   c. Specific treatments--

      1) Type of treatment

      2) Response of patient

   d. Medications--

      1) Specific information on method and site of administration, especially if IM, Sub-Q, intradermal, or IV

      2) Patient's response to medication

      3) Reason for medication if not routine order

      4) Reasons for medications not given

   e. Diagnostic tests--

      1) Those performed on the nursing unit

      2) Whether or not patient went to another area for tests

   f. Safety precautions

      1) Any precautions that were utilized to keep patient or others safe

      2) Frequent notations if this is a type of restraint or safety measure used for security reasons

ANSWERS TO TEST

g. Response of patient and/or family to specific teaching--

   1) Teaching activity

   2) Patient's and/or family's response

   3) Documentation of patient's and/or family's ability to carry out procedure on own

h. Transfer and discharge summaries--

   1) Progress and treatment of patient

   2) Current status of patient's condition

   3) Any instructions given to institution where patient will be transferred, or, if patient is to be discharged, instructions to patient and family

   4) Type of transportation used and who accompanied patient

   5) Patient's instructions for self care and verbalization that patient understood the directions

i. Expiration summary--

   1) Time respirations and other vital signs cease

   2) Condition of body

   3) Notification of physician

   4) Family present or notified

   5) Disposition of valuables and clothing

   6) Notification of specific mortuary or morgue

10. Evaluated to the satisfaction of the instructor

11. Evaluated to the satisfaction of the instructor

12. Evaluated to the satisfaction of the instructor

PREPARATION AND CARE OF PREOPERATIVE AND POSTOPERATIVE PATIENT
UNIT III

UNIT OBJECTIVE

After completing this unit, the student should be able to prepare and give care to a patient throughout surgical treatment. The student should also be able to use equipment and to perform procedures using surgical asepsis. This knowledge will be shown by completing assignment sheet, job sheets, and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with preparation and care of the preoperative and postoperative patient to their correct definitions.
2. Describe preoperative procedures to complete when patient is admitted for surgery.
3. Describe ways in which nurse may give support when patient has fears related to surgical treatment.
4. Distinguish among types of anesthesia.
5. State nursing responsibilities while performing postoperative care.
6. List common types of equipment that may be used in the postoperative period.
7. List symptoms of postoperative complications.
8. Describe nursing actions to take when symptoms of postoperative complications occur.
9. Match terms associated with surgical asepsis to their correct definitions.
10. Select from a list reasons for maintaining aseptic techniques.
11. Select from a list general principles of surgical asepsis.
12. List methods of sterilization.
13. Match terms associated with urinary catheterization to their correct definitions.
14. State purposes of urinary catheterization.
15. State factors to consider when performing a urinary catheterization.
16. List information that should be charted in urinary catheterization.

OBJECTIVE SHEET

17. Select from a list reasons for applying dressings.

18. Arrange in order steps to follow when applying a dressing.

19. Plan care for surgical patients.

20. Demonstrate the ability to

    a. Use surgical scrub.

    b. Open sterile packs.

    c. Put on sterile gloves.

    d. Perform urinary catheterization.

    e. Apply dressings and binders.

PREPARATION AND CARE OF PREOPERATIVE AND POSTOPERATIVE PATIENT
UNIT III

SUGGESTED ACTIVITIES

I. Suggested activities

   A. Order materials planned to supplement unit--Filmstrips.

      (NOTE: These filmstrips are available from Trainex Corporation, Box 116, Garden Grove, California 92642.)

      1. *Operating Room Scrubbing, Gowning, and Gloving*
      2. *Preoperative Skin Preparation*
      3. *Sterile Technique and Dressing Change*
      4. *Application of Bandages and Binders*
      5. *Urinary Catheterization*
      6. *Discharge Planning*

         (NOTE: This filmstrip covers systematic-approach assessment, developing a plan, implementation, and evaluation.)

      7. *Preoperative Patient*

         (NOTE: This filmstrip covers nursing assessment and teaching and anticipatory guidance.)

      8. *Postoperative Patient*

         (NOTE: This filmstrip covers nursing assessment and nursing care.)

      9. *Preparing for Your Surgery*
      10. *Care after Your Surgery*

   B. Provide students with objective sheet.

   C. Provide students with information, assignment, and job sheets.

   D. Discuss unit and specific objectives.

   E. Discuss information and assignment sheets.

   F. Develop appropriate learning activities for special needs students.

   G. Obtain all equipment used in your hospital that students will be using or seeing when patients have surgery, and demonstrate their uses.

SUGGESTED ACTIVITIES

H. Provide other case studies to use to practice planning care for surgical patients.

I. Provide chart forms, care plans, and surgical checklists for students to practice charting.

J. Demonstrate and discuss procedures outlined in job sheets.

K. Make sure each student has a pair of sterile gloves, a urinary catheterization kit, and dressings to practice skills in Job Sheets #3, #4, and #5.

(NOTE: If possible, allow each student his or her own equipment to practice job sheet skills.)

L. Ask a surgical nurse or technician to teach surgical preps if your hospital requires floor nurses to do these procedures.

M. Make arrangements so that students may observe various types of surgeries before they care for a surgical patient.

(NOTE: If possible, let each student see one surgery before caring for a surgical patient. This will give him or her an understanding of what a patient experiences.)

N. Allow time for return demonstrations of skills outlined in job sheets.

O. Give test.

P. Reteach if necessary

II. Instructional materials

A. Objective sheet

B. Suggested activities

C. Information sheet

D. Assignment Sheet #1--Plan Care for Surgical Patients

E. Answers to assignment sheet

F. Job sheets

1. Job Sheet #1--Use Surgical Scrub
2. Job Sheet #2--Open Sterile Packs
3. Job Sheet #3--Put on Sterile Gloves
4. Job Sheet #4--Perform Urinary Catheterization
5. Job Sheet #5--Apply Dressings and Binders

SUGGESTED ACTIVITIES

G. Test

H. Answers to test

III. Unit references

A.. LeMaitre, George D., and Janet A. Finnegan. *The Patient in Surgery: A Guide for Nurses.* Philadelphia: W.B. Saunders Company, 1975.

B. Robinson, Lisa. *Psychological Aspects of the Care of Hospitalized Patients.* Philadelphia: F.A. Davis Company, 1981.

PREPARATION AND CARE OF PREOPERATIVE AND POSTOPERATIVE PATIENT
UNIT III

INFORMATION SHEET

I. Terms and definitions

A. Pre--Prefix meaning *before*

B. Post--Prefix meaning *after* or *behind*

C. Anesthesia--Loss of sensation with or without unconsciousness

D. Disfigurement--Marred or scarred appearance

E. Regional--Pertaining to an area or part

F. General anesthesia--Loss of sensation over entire body

G. Local anesthesia--Loss of sensation in a small area

H. Hypothermic anesthesia--Lowering the temperature of a part of the body or of the entire body

I. Recovery room--Room or area with special equipment for the care of a patient immediately following surgery

J. Sanguineous--Pertaining to, or containing blood

K. Serosanguineous--Containing both serum and blood

L. Shock--Depressed condition of many body functions due to failure of enough blood to circulate through the body

M. Thrombophlebitis--Inflammation of a vein associated with a clot

N. Pitting edema--Swelling of the tissues due to collection of fluid; characterized by preservation for a short time of indentations on the skin made by pressing with the fingers

O. Prosthesis--Artificial replacement or enhancement of a body part

P. Surgery--Planned anatomic alteration of the human organism, designed to arrest, alleviate, or eradicate some pathological process, or to reconstruct

(NOTE: There are two types of surgery: elective and emergency. *Elective surgery* means that the condition has been diagnosed, surgery is one alternative of treatment, and patient may elect the procedure. *Emergency surgery* means that it is the only recourse and that the condition may be a life-and-death matter if surgery does not occur.)

Q. Major surgery--More extensive procedure; usually calls for a general anesthetic that may result in a longer postrecovery stage

INFORMATION SHEET

- R. Hemorrhage--Abnormal internal or external discharge of blood
- S. Atelectasis--Collapsed or airless condition of the lung
- T. Evisceration--Protrusion of intestines through an abdominal wound; removal of the internal contents of a body
- U. Minor surgery--Less extensive procedure; may call for a local or regional anesthetic and a shorter recovery period

  (NOTE: Minor surgery becomes *major* when it is your own body.)
- V. Hematemesis--Vomiting of blood
- W. Dehiscence (wound)--Separation of all the layers of an incision or wound

II. Preoperative procedures to complete when patient is admitted for surgery

(NOTE: These are basic procedures that are used in most facilities. There may be differences in your hospital policies and procedures. Know and adhere to those rules.)

- A. Preoperative orders

  (NOTE: Many patients will come with the physician's orders in hand. Others will be admitted and the nurse in charge will call for orders.)

  1. Preparation of operative site

     (NOTE: It is becoming more common for patients to be taken to OR to be prepped for surgery, or for the surgical staff to come to the patient's room to prepare the site.)

  2. Medications

     (NOTE: Orders may include a mild sedative, antibiotic, a medicated douche, and the pre-operative medication. Many times the anesthesiologist will order the sedative and preoperative medication after visiting with the patient.)

  3. Treatments

  4. Diagnostic tests

     (NOTE: It is most common for the physician to order routine laboratory work and chest X rays before surgery. Other tests, such as an EKG or IVP, may be ordered before the patient is taken to surgery. Abnormal lab values may call for postponement of surgery.)

  5. Foods and fluids

     (NOTE: It is most important to know if patient will be able to eat and drink and what type of diet is ordered. Many patients will have nothing by mouth after midnight the night before surgery.)

INFORMATION SHEET

B. Permission for surgery

1. Signed permit is required for all persons who are to have surgery

   (NOTE: It is now becoming routine for the surgeon to explain the procedure to the patient, with the patient understanding fully what will happen in surgery, before the permit is signed. If surgery is an emergency and patient is not able to sign permit, a guardian, parent, or spouse may sign, depending on the legal statutes in that state.)

2. Signature must be witnessed by a competent person other than a family member

3. Permit must be signed by the patient, or if unable or a minor, by a family member or guardian

4. Permit MUST be signed before any preoperative sedative is given

5. Refusal to sign permit must be reported to the charge nurse and the physician

C. Physical examination

1. Exam may be done in physician's office or in treatment room of hospital

   (NOTE: An upper-respiratory infection or other secondary condition may cause a postponement of surgery.)

2. History and physical must be completed in most hospitals as well as a copy of the form on the patient's chart before the patient is taken to surgery

D. Preoperative teaching

1. Teaches patient what will be expected of him or her in the immediate recovery period and later when patient is returned to room

   EXAMPLES: Turn, cough, deep breathe

2. Teaches the patient what to expect and what type of equipment will be used

   EXAMPLES: O_2 equipment, IVs, monitors, dressings

3. Tells family what to expect, approximate time for surgery and where to wait until surgery is over, and how the family may help in giving care to the patient during the recovery period

INFORMATION SHEET

E. Care of valuables

1. Any jewelry, large sums of money, and/or other valuables should either be sent home with the family or locked in the hospital vault after an itemized list has been signed by the patient

2. Recordings should be made in the chart telling what valuables were and how they were handled

F. Personal care

1. Patient should have identification band secured somewhere on body

2. Bath or shower may be taken before surgery and before patient is dressed in hospital gown

3. Mouth care should be completed

   (NOTE: Check hospital policy concerning dentures. In some instances dentures are removed before administration of anesthesia; in other cases dentures may be left in, to aid in fitting the anesthesia mask to the patient's face. Many patients are upset if asked to take dentures out before going to surgery. In many cases patients may wear dentures into surgery if floor nurse sends labelled container for dentures to be placed in and sent back to the floor.)

4. Nail polish, makeup, jewelry, undergarments, and any prosthesis should be removed

   (NOTE: Some hospitals are becoming more lenient about makeup [false eyelashes] and some jewelry if patient is unable to take it off. Some wedding bands may be taped or secured to finger and left on during surgical procedure.)

5. Patient is asked to urinate before preoperative medication is given; patient must remain in bed and side rails are put up when preoperative medication is given

   (CAUTION: This is a very important step in preparing patients. They must realize that after the medication and the side rails are up, they can no longer get out of bed.)

6. Vital signs are taken and recorded before patient is taken to surgery

   (NOTE: Hospital policy will dictate when VS are taken--before and/or after pre-op. Abnormal vital signs such as temperature or blood-pressure elevation may cause surgery to be cancelled.)

INFORMATION SHEET

G. Documentation of patient records

1. Nurses notes should be complete and accurate

2. Surgery permit must be signed

   (NOTE: Some hospital policies will require different forms to be signed before patient is taken to surgery. Make sure you know and understand the policies.)

3. Recent laboratory and X-ray reports should be secured in patient's chart before surgery proceeds

4. Preoperative checklist should be signed

   (NOTE: Many hospitals have a checklist on the front or inside of the patient's chart. This is one way that all preoperative procedures can be checked off as they are completed and signed by person in charge.)

H. Preparation of bed and unit

1. Surgical or postoperative bed should be made after patient is taken to surgery

2. Furniture should be moved aside so that patient can be transferred from stretcher back to bed easily

3. Necessary equipment should be in room and ready for use as soon as patient arrives

   EXAMPLES: Emesis basin, tissues, stethoscope, sphygmomanometer, suction equipment, oxygen, IV standard

III. Ways in which nurse may give support when patient has fears related to surgical treatment

A. Fear of the unknown

1. Explain each procedure to patient and family in language they will understand

2. Tell patient what the recovery room will be like, what will be expected or her or him, and any other information as needed

3. Explain the importance of following instructions about breathing exercises, medications that patient will receive, and what it will be like in the first recovery stage

INFORMATION SHEET

B. Fear of death, disfigurement

1. Discuss patient's fears and give all information you can about the type of surgery that will be done

   (NOTE: Always listen carefully to the patient who is extremely anxious about the surgery. This anxiety may be a reason to postpone the procedure. Observe carefully the patient who does not appear anxious at all--some anxiety is to be expected.)

2. Answer any questions you can concerning the type of procedure to be performed and the type of anesthesia to be used

C. Fear of pain

1. Prepare the patient if he or she will experience pain; NEVER tell the patient there will be no discomfort if you know there will be

2. Reassure the patient that pain will be controlled

D. Fear of being alone, helpless, and dependent

1. Stay with patient and allow him or her to express feelings

   (NOTE: When a patient is alone at night before surgery in a strange place with unfamiliar surroundings and noises, it is especially comforting for the nurse to spend some time at his or her bedside.)

2. Make sure the patient has some input into his or her care and allow the patient to make some decisions when possible

3. Allow the patient to have someone with whom he or she is familiar, either a family member or a nurse, accompany him or her to the OR

IV. Types of anesthesia

(NOTE: Many drugs are used with types of anesthesia for various benefits. Muscle relaxants increase relaxation of muscles during the anesthesia; tranquilizers reduce tension and anxiety and may reduce the incidence of vomiting during or following anesthesia.)

A. Regional

1. Local

   EXAMPLES: Procaine, Pontocaine, Xylocaine, Ethyl Chloride Spray

2. Spinal

   (NOTE: Drugs such as procaine, Nupercaine, and Pontocaine are injected into the lumbar spinal region.)

INFORMATION SHEET

3. Caudal

   (NOTE: Drugs such as procaine, Pontocaine, and Xylocaine are injected into the sacral area.)

B. General

1. Inhalation

   EXAMPLES: Halathane, Cyclopropane, nitrous oxide

2. Intravenous

   EXAMPLES: Pentothal, Amytal, Nembutal

3. Rectal

   EXAMPLES: Avertin, Pentothal, ether

C. Hypothermic

1. Surface-induced

   (NOTE: The affected part is cooled by using special equipment or by packing in ice.)

2. Internal cooling

   (NOTE: Cooling is achieved by placing ice packs around a specific internal organ or by instilling cold fluids into a body cavity.)

3. Systemic

   (NOTE: Bloodstream is cooled by diverting the blood through heat-exchanging devices and returning it to the body.)

V. Nursing responsibilities while performing postoperative care (Assignment Sheet #1)

A. Immediate (recovery room)

1. To provide for safety (side rails up)

2. To position patient for adequate oxygen exchange

   (NOTE: Patient may still have airway inserted and may need closer monitoring until swallow reflex returns and patient can breathe completely on own. O_2 will be given while patient is in the recovery room.)

INFORMATION SHEET

3. To check physician's orders for immediate procedures to be carried out

   (NOTE: All orders previous to surgery are cancelled unless physician states to resume orders.)

   EXAMPLES: Drainage tubes, medications, IV fluids, suctioning, dressings, vital signs

4. To observe and record frequently and accurately information concerning dressings, color, vital signs, and level of consciousness

5. To monitor intake and output of fluids in IVs, dressings, and drainage tubings

B. Recovery in room

1. To obtain report from recovery-room staff before patient's return

   (NOTE: The nurse should be aware of any additional equipment that might be needed, of any unusual signs or symptoms that could indicate possible problems, and of the outcome of the surgery.)

2. To make sure there is enough help to make the move from the stretcher to the patient's bed easily and carefully

3. To continue oxygen if needed and to put up side rails of bed

4. To take all vital signs and to check all drainage tubings, dressings, IV fluids, and color of patient

5. To compare findings with the recovery-room report as the nurse charts his or her results

   (NOTE: If any major deviation occurs, report it at once.)

6. To check and carry out any further orders of the physician

7. To notify family that patient has returned

8. To monitor the patient according to hospital or physician's orders

   (NOTE: The number of times and frequency that vital signs are taken may be a hospital policy or a physician's choice. If you feel that the patient should be monitored more closely, you may do this without an order.)

9. To position patient frequently and assist with breathing and coughing exercises

10. To assist with movement and ambulation as soon as possible

11. To reinforce dressings as needed or to change if physician indicates

12. To observe, report, and record any unusual symptoms

INFORMATION SHEET

VI. Common types of equipment that may be used in the postoperative period

A. Intravenous therapy setup used for parenteral fluid administration (Figure 1)

EXAMPLES: IV tubings, IV standards, infusion pumps and monitors

FIGURE 1

INFORMATION SHEET

B. Suction machines to provide for evacuating organs or drainage of wounds (Figures 2 and 3)

EXAMPLES: Portable suction machine, wall suction machine

FIGURE 2 Portable suction machine

FIGURE 3 Wall suction machine

INFORMATION SHEET

C. Gravity-flow closed pumps (Figure 4)

FIGURE 4

D. Drainage tubings to assist in promoting flow of fluids from organs or wounds (Figures 5 and 6)

EXAMPLES: NG tube, T-tube

FIGURE 5 NG Tube

INFORMATION SHEET

FIGURE 6 T-Tube

VII. Symptoms of postoperative complications

A. Hemorrhage

1. Excessive sanguineous or serosanguineous drainage
2. Bloody drainage from suction or drainage apparatus
3. Hematemesis
4. Shock symptoms

B. Shock

1. Drop in blood pressure; rapid, weak pulse; rapid, shallow respirations
2. Cool, moist skin
3. Temperature below normal
4. Pallor or cyanosis, particularly lips and nails
5. Restlessness and anxiety
6. Thirst
7. Nausea and vomiting

INFORMATION SHEET

8. Loss of consciousness

   (NOTE: Hemorrhage and shock symptoms may occur early in the postoperative period.)

C. Thrombophlebitis

   1. Pain in the calf of the extremity
   2. Swelling of limb
   3. Redness around area
   4. Temperature elevation

D. Hypostatic pneumonia

   1. Slight temperature elevation
   2. Increased pulse rate and rapid, slow respirations
   3. Cough

E. Wound infection

   1. Temperature elevation

      (NOTE: A temperature elevation two or three days after surgery is one sign of infection.)

   2. Increased pulse rate
   3. Pain, tenderness, or swelling at wound site
   4. Redness or inflammation of wound site
   5. Foul-smelling, purulent drainage
   6. Elevated white cell count

F. Gastrointestinal disturbance

   1. Abdominal distention
   2. Flatulence
   3. Pain or cramping in abdomen
   4. Nausea or vomiting
   5. Dryness of mouth
   6. Constipation

INFORMATION SHEET

G. Wound dehiscence and/or evisceration

(NOTE: This complication occurs after abdominal surgery.)

1. Unexplained fever
2. Unexplained tachycardia and occasional hypotension
3. Unusual wound pain
4. Distention of abdominal area

   (NOTE: These are early signs of dehiscence.)

5. Sudden gush of fluid from a previously dry wound
6. Obvious opening of wound with protrusion of organs

H. Infiltration of intravenous infusion

1. Area around needle becomes firm, cold, and pale
2. Patient complains of pain or numbness in affected area
3. Edema is noticed around needle site and area

VIII. Nursing actions to take when symptoms of postoperative complications occur

A. Hemorrhage

1. Report symptoms immediately
2. Apply pressure on site or pressure point if appropriate

   (CAUTION: DO NOT REMOVE DRESSINGS IF SITE IS SURGICAL INCISION; JUST REINFORCE WITH EXTRA DRESSINGS.)

3. Keep patient quiet
4. DO NOT panic
5. Position patient in either recumbent position or with extremities elevated to increase blood supply to head, unless contraindicated
6. Provide for warmth if patient is chilling
7. Be prepared to assist with administration of parenteral fluids and/or blood transfusion
8. Monitor vital signs frequently

INFORMATION SHEET

B. Shock

1. Report symptoms immediately
2. Elevate foot of bed unless contraindicated
3. Keep patient only warm enough to prevent heat loss
4. Restrict fluids and food until patient has been checked by physician
5. Check vital signs
6. Administer oxygen if ordered
7. Be prepared to assist with administration of parenteral fluids
8. Keep patient quiet

C. Thrombophlebitis

(NOTE: Try to prevent thrombophlebitis by assisting in early ambulation and in the use of antiembolic hose.)

1. Avoid any strain on leg and DO NOT MASSAGE
2. Support leg as prescribed
3. Monitor vital signs as indicated

D. Hypostatic pneumonia

1. Turn frequently and encourage deep breathing and coughing exercises
2. Assist patient in using respiratory aids

   (NOTE: Various methods are used to encourage patients to use lungs and muscles needed in breathing. Some hospitals use blow bottles or balloons. Respiratory therapy has equipment designed for that purpose.)

3. Be alert to respiratory-sound changes

E. Wound infection

1. Maintain aseptic technique and WASH HANDS FREQUENTLY
2. Change dressings as often as needed
3. Encourage food and fluid intake
4. Encourage rest and sleep
5. Administer antibiotic as prescribed

INFORMATION SHEET

F. Gastrointestinal disturbance

1. Change position frequently and encourage ambulation as soon as possible
2. Provide mouth care frequently
3. Avoid cold and high-glucose beverages which may cause gas
4. Use rectal tube if ordered
5. Give appropriate medication to prevent vomiting if prescribed
6. Auscultate abdomen for bowel sounds

G. Wound dehiscence and/or evisceration

1. DO NOT panic
2. Keep patient quiet and still

   (CAUTION: One cough could cause evisceration.)

3. Remove dressing and inspect wound
4. Apply a heavy dressing and binder if needed to close edges of incision

   (NOTE: If evisceration has occurred, protruded organs should be kept moist with sterile saline.)

5. Notify surgeon

   (NOTE: The physician will probably take the patient back to surgery for reclosure.)

H. Infiltration of intravenous infusion

1. Observe site frequently
2. Immobilize site of administration, depending on site used
3. Avoid any unnecessary pulling or obstruction of tubing, container, or needle

   (NOTE: Be extra careful when removing patient's gown or pajamas and when changing the bed. If tubing is pulled or kicked, infiltration may result.)

4. Monitor flow and site; document observations

INFORMATION SHEET

IX. Terms associated with surgical asepsis

A. Medical asepsis--Procedures used to protect the patient and his or her environment from the transmission of disease-producing organisms from one person to another

(NOTE: The best method to promote medical asepsis is correct handwashing. Sterilization or disinfection of articles used by one patient before use by another will also promote medical asepsis.)

B. Surgical asepsis--Procedures used to keep objects and areas sterile

(NOTE: A surgical scrub on hands and arms before performing any sterile procedure is of major importance. Sterilizing articles before use in the operating room, delivery room, and out on the unit will provide for asepsis.)

C. Clean (as applied to medical asepsis)--All gross contamination and many microorganisms have been removed

D. Sterile (as applied to surgical technique)--Free of all microorganisms and spores

E. Autoclave--Apparatus for sterilizing objects, using steam under pressure

F. Forceps--Surgical instrument with two opposing blades or limbs controlled by handles

G. Sterilization--Destruction of all microorganisms on a substance by exposure to chemical or physical agents

H. Disinfection--Destruction of infection-producing organisms

(NOTE: Heat and certain other physical agents such as live steam can be termed *disinfectants*. In common usage, however, the term *disinfection* usually refers to the use of chemical solutions to destroy pathogens. *Sterilization* usually refers to the procedure of boiling or autoclaving materials.)

X. Reasons for maintaining aseptic techniques

A. Failure to be meticulous is not readily detectable

(NOTE: Aseptic techniques are only as good as the most careless person performing them. Breaks in technique endanger other personnel as well as patients.)

B. Due to the indiscriminate use of antibiotics, many strains of bacteria are becoming resistant to antibiotics

C. Some bacteria can live for months or years in dust and bedding

D. Some persons can carry bacteria to others in the nasal passages and on the skin without showing any clinical symptoms or being aware that they are carriers

INFORMATION SHEET

E. Organisms can be carried from one patient to another on improperly cleaned utensils

F. Many persons, such as newborn infants, debilitated patients, and patients with wounds, are susceptible to infectious organisms

XI. General principles of surgical asepsis (Job Sheets #1, #2, and #3)

A. Begin with clean hands and use sterile gloves

B. Handle sterile equipment only with sterile equipment

C. Establish a sterile field or area and maintain the sterility

(NOTE: The field must be kept dry. You should not reach over it, brush against it, or allow your uniform to touch it. Never turn your back to an uncovered sterile field, and never cough or sneeze over it.)

D. Open sterile packs so that you keep the inside of the wrapper and contents sterile

E. Open sterile packs only when you are ready to use

F. Consider an article unsterile if there is any doubt at all about its sterility

(NOTE: Be sure to check for date of sterilization; color, if applicable; and/or tape, if used.)

G. Never return materials to a sterile container

H. Know that skin can never be sterile, only clean

XII. Methods of sterilization

A. Boiling

(NOTE: This method destroys most organisms in ten minutes, but it does not destroy spores.)

B. Autoclaving

(NOTE: Exposure to steam for fifteen minutes at eighteen pounds pressure and 257°F kills all organisms, including spores.)

C. Chemical disinfection

(NOTE: Time varies with disinfectant used.)

D. Dry heat

(NOTE: Hot-air sterilization or gas sterilization involves the use of equipment similar to an ordinary baking oven.)

INFORMATION SHEET

XIII. Terms associated with urinary catheterization

A. Catheter--Tube for removing or injecting fluids

(NOTE: Catheters are made of various materials such as rubber, silicone, or sometimes flexible synthetic material. They are measured by the French scale according to the diameter of the lumen. The size of the catheter divided by three equals the diameter of the lumen in millimeters. For example, a size-eighteen catheter has a lumen which is six millimeters in diameter [18 ÷ 3 = 6]. For a child, sizes eight to ten would be used; for a female, sizes fourteen to sixteen would be used; and for a male, sizes eighteen to twenty would be used.)

B. Catheterization--Insertion of a catheter through the urethra into the urinary bladder

C. Urinary retention--Inability to empty the bladder

D. Urinary suppression--Inability of the kidneys to secrete urine

E. Residual--Urine retained in the bladder after voiding

(NOTE: Normal residual is 1 to 3 cc.)

F. Foley--Double-lumen or triple-lumen catheter with an inflatable balloon near the tip

G. Distended--Enlarged from internal pressure

H. Intermittent--Occurring at intervals

I. Irrigation--Washing of a body cavity with water or other fluid

J. Urethral meatus--External opening of the urethra

K. Culture--Growth of microorganisms in a special substance in the laboratory

L. Sensitivity--Laboratory test to determine which medication weakens or destroys a cultured microorganism

XIV. Purposes of urinary catheterization

(NOTE: More and more physicians and nurses are trying to avoid catheterizing patients. Urinary infections are very easily acquired in the catheterization process, especially if the catheter needs to be left for long periods of time.)

A. Relieve urinary retention

B. Empty the bladder before surgery, delivery, or an examination

C. Determine urine residual

D. Obtain a sterile specimen for culture and sensitivity

INFORMATION SHEET

   E. Provide long-term urinary maintainence

   F. Irrigate bladder

XV. Factors to consider when performing a urinary catheterization (Job Sheet #4)

   A. Try other measures first; catheterize only when necessary

   B. The bladder is a sterile cavity, and sterile technique must be followed

   C. Infection may be produced when poor techniques are used or when catheterization must be repeated

   D. Patient should be properly prepared by explaining the procedure, by providing for privacy, and by reassuring patient when performing the procedure

   E. Correct equipment should be used to minimize cost to patient

XVI. Information that should be charted in urinary catheterization

   A. Why procedure was performed

   B. What size and type of catheter was used

   C. Time when procedure was performed

   D. When urine appeared and amount and appearance of urine

   E. How patient tolerated procedure and any patient response

XVII. Reasons for applying dressings

(NOTE: Many times binders are used to secure dressings and to support incision area.)

   A. To prevent contamination

   B. To protect wound from further injury

   C. To apply medication

   D. To apply pressure

   E. To absorb drainage

XVIII. Steps to follow when applying a dressing (Job Sheet #5)

   A. Check physician's orders

   (NOTE: This step may be number one if the physician indicates that he or she wants dressing changed within a time limit and with specific instructions on type of dressing.)

INFORMATION SHEET

B. Identify patient and explain procedure

C. Check dressing to determine what is needed to replace it

D. Gather all equipment and assemble it at bedside before removing soiled dressing

E. Wash hands or apply sterile gloves, depending on the condition of the wound

F. Change dressing and secure clean dressing

G. Dispose of old dressing properly

H. Wash hands and document the change, including appearance of wound and what type of dressing was applied

PREPARATION AND CARE OF PREOPERATIVE AND POSTOPERATIVE PATIENT
UNIT III

ASSIGNMENT SHEET #1–PLAN CARE FOR SURGICAL PATIENTS

NAME____________________________________ SCORE__________

Caring for a surgical patient requires much preplanning and organization. When you are assigned to a patient having surgery, you should be able to consider and plan for the care that the patient will receive before and after surgery. In this assignment sheet, you will be asked to plan care for two patients. In Part I, a case study is given to you to plan care. Write your nursing actions/responsibilities in the spaces provided.

In Part II, you are asked to plan care, to implement that care, and to evaluate your actions in the spaces provided. Your instructor will discuss your first care plan and help you plan care for the patient assigned to you in Part II. Hand in to instructor for evaluation.

ASSIGNMENT SHEET #1

PART I

DATE: ____________

PATIENT INITIALS: J. H.

DIAGNOSIS: Endometriosis with fibroid tumor masses with hyperplastic changes in endometrium

AGE: 52

SEX: F

OCCUPATION: Elementary education teacher, third grade

PREOPERATIVE SYMPTOMS: Menorrhagia, low back pain, pelvic discomfort, fatigue

SURGICAL PROCEDURE: Abdominal hysterectomy

DATE OF SURGERY: March 5, 1981

PREOPERATIVE ORDERS	NURSING ACTIONS/RESPONSIBILITIES
A. Routine laboratory work and chest X rays	
B. Operative permit	
C. Surgical prep	
D. Betadine douche this P.M. and early A.M.	
E. Enemas till clear early A.M.	
F. NPO after midnight	
G. Dalmane 30 mg HS	
H. Demerol 75 mg Atropine gr 1/150 Vistaril 25 mg } IM at 7:30 A.M.	
I. Teach deep breathing and coughing exercises	

ASSIGNMENT SHEET #1

PREOPERATIVE ORDERS	NURSING ACTIONS/ RESPONSIBILITIES
J. General diet this P.M.	

POSTOPERATIVE ORDERS, FIRST DAY POST-OP	NURSING ACTIONS/ RESPONSIBILITIES
A. NPO, may have ice chips if not nauseated	
B. DC IV if ice chips tolerated; if not, hang 1,000 cc NS to run 8 hr	
C. CBC in A.M.	
D. Cough and deep breath q 2 hrs	
E. VS every 15 mins x 4 then q 2 hrs till stable	
F. Check dressing; reinforce if needed	
G. Dangle this P.M., and up ad lib in A.M.	
H. Clear liquids in A.M. if not nauseated	
I. I & O	
J. Cath if needed X 1	
K. Check for vaginal drainage	
L. Demerol 75 mg Vistaril 25 mg } IM q 3-4 hr prn pain	

ASSIGNMENT SHEET #1

POSTOPERATIVE ORDERS, FIRST DAY POST-OP

NURSING ACTIONS/ RESPONSIBILITIES

POSTOPERATIVE ORDERS, SECOND DAY POST-OP

A. Full liquids this A.M. if tolerated, soft diet this P.M.

B. Up ad lib

C. Tylenol #3 "PO" q 3-4 hrs prn pain

D. Change dressing prn

NURSING ACTIONS/ RESPONSIBILITIES

ASSIGNMENT SHEET #1

POSTOPERATIVE ORDERS, SECOND DAY POST-OP	NURSING ACTIONS/ RESPONSIBILITIES
POSTOPERATIVE ORDERS, THIRD DAY POST-OP	**NURSING ACTIONS/ RESPONSIBILITIES**
A. Soft diet B. Change dressing C. Take culture of wound drainage D. Monitor temp. q 2 hrs if 101 and over give Tylenol gr X po E. Increase oral fluid intake to 1500 cc per 24 hrs	

ASSIGNMENT SHEET #1

PART II

DATE: ______________

PATIENT INITIALS: ______________

DIAGNOSIS: ______________

AGE: ______________ SEX: ______________

OCCUPATION: ______________

PREOPERATIVE SYMPTOMS: ______________

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SURGICAL PROCEDURE: ______________

DATE OF SURGERY: ______________

PREOPERATIVE ORDERS	NURSING ACTIONS/ RESPONSIBILITIES

ASSIGNMENT SHEET #1

PREOPERATIVE ORDERS	NURSING ACTIONS/ RESPONSIBILITIES
POSTOPERATIVE ORDERS, FIRST DAY POST-OP	NURSING ACTIONS/ RESPONSIBILITIES

ASSIGNMENT SHEET #1

POSTOPERATIVE ORDERS, FIRST DAY POST-OP	NURSING ACTIONS/ RESPONSIBILITIES
POSTOPERATIVE ORDERS, SECOND DAY POST-OP	NURSING ACTIONS/ RESPONSIBILITIES

ASSIGNMENT SHEET #1

POSTOPERATIVE ORDERS, SECOND DAY POST-OP	NURSING ACTIONS/RESPONSIBILITIES
POSTOPERATIVE ORDERS, THIRD DAY POST-OP	NURSING ACTIONS/RESPONSIBILITIES

PREPARATION AND CARE OF PREOPERATIVE AND POSTOPERATIVE PATIENT

UNIT III

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

PREPARATION AND CARE OF PREOPERATIVE AND POSTOPERATIVE PATIENT
UNIT III

JOB SHEET #1--USE SURGICAL SCRUB

(NOTE: This job sheet describes the two variations of surgical-scrub technique. Many institutions develop their own procedure for the scrub and denote lengths of time for each area, such as surgery or delivery.)

I. Equipment
  A. Scrub brushes
  B. Orange stick
  C. Recommended antibacterial soap
  D. Scrub sink
  E. Towel
  F. Mechanical hand dryer, if used
  G. Knee controls in sink

II. Procedure for long-term scrub technique
  A. Prepare for scrubbing
    1. Wear freshly laundered gown or scrub suit
    2. Roll sleeves to three inches above elbow
    3. Wear scrub cap and cover all hair completely
    4. Clean fingernails
  B. Scrub hands using antibacterial cleanser
    1. Wet hands and forearms

       (NOTE: Adjust temperature of water according to type of controls your sink provides.)

    2. Spread a few drops of cleanser over hands and arms
    3. Rub hands and arms a few times and add more water to give more suds
    4. Clean under the nails with orange stick
    5. Wet hands and forearms and reapply cleanser
    6. Pick up scrub brush from sterile container

JOB SHEET #1

7. Wet brush and use cleanser on brush

8. Add small amount of water to brush to produce suds

9. If right-handed, hold brush in right hand and scrub left hand

10. Using circular brush motion, scrub all sides of the fingers, remainder of hand, and forearm (Figures 7 and 8)

FIGURE 7

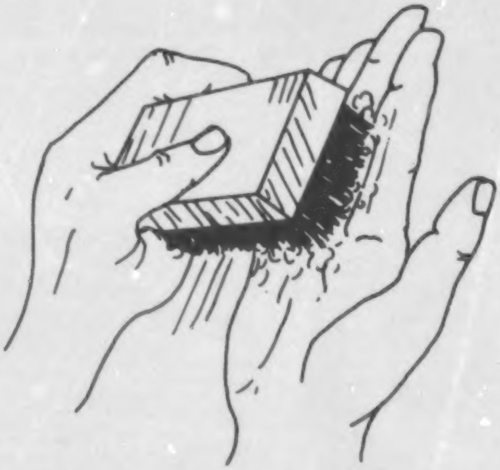
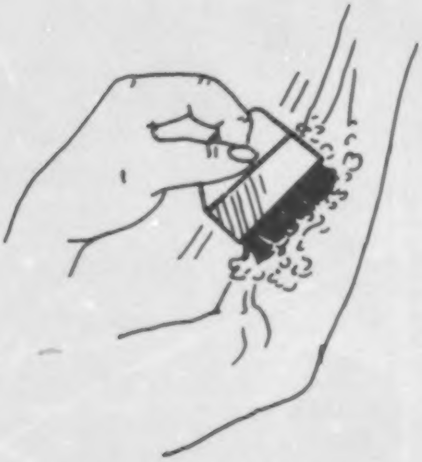


FIGURE 8



11. After scrubbing, hold hands higher than elbows to prevent contaminated water from running down

12. Change brush to other hand and repeat procedure

13. Continue scrubbing one hand, arm, and then the other for three to five minutes in emergency, or seven to ten minutes in delivery room or nonemergency situations

14. Rinse hands, arms, and brush well under running water

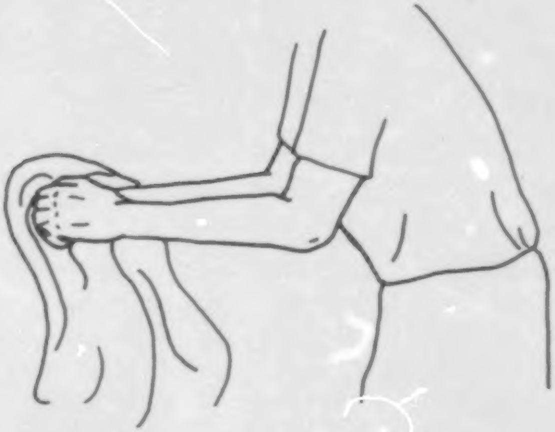
15. Keep hands higher than elbows in front of you

JOB SHEET #1

C. Dry hands with sterile towel (Figure 9)

(NOTE: By bending at the waist, you can prevent contamination of towel.)

FIGURE 9



1. Place upper end of towel in one hand and dry fingers of other hand, then the arm of same side
2. Transfer lower end of towel and dry hand; then dry fingers, hand, and arm of second hand

   (NOTE: Take care not to touch the towel against uniform or scrub gown while drying.)
3. Drop towel in designated container or place
4. Hold both hands higher than elbows

III. Procedure for short-term scrub technique

A. Wash hands and arms well

B. Clean nails with orange stick; use plenty of running water

C. With brush, scrub one hand and arm and then the other, using the following brush count: hands--20 strokes to nails, 10 strokes to fingers and surfaces of hands; arms--10 strokes to below elbows

D. Rinse hands and arms; turn off faucet with towel if hand controlled

JOB SHEET #1

IV. Checklist for using long-term scrub technique

	Performed Well	Needs Improvement
A. Prepared for scrubbing		
1. Wore freshly laundered gown or scrub suit with sleeves rolled up to 3 inches above elbow	☐	☐
2. Wore scrub cap with all hair covered completely	☐	☐
3. Cleaned fingernails correctly	☐	☐
B. Scrubbed hands using antibacterial cleanser		
1. Rubbed hands and arms and added more water to give more suds	☐	☐
2. Wet hands and forearms and spread a few drops of cleanser over hands and arms	☐	☐
3. Cleaned fingernails correctly	☐	☐
4. Wet hands and forearms and reapplied cleanser	☐	☐
5. Picked up sterile scrub brush, wet it, and applied cleanser to brush	☐	☐
6. Added small amount of water to brush to produce suds	☐	☐

Comments: ____

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JOB SHEET #1

	Performed Well	Needs Improvement
7. Used circular brushing motion and scrubbed all sides of fingers, hand, and forearm	☐	☐
8. Held hands higher than elbows after scrubbing	☐	☐
9. Changed brush to other hand and repeated the process on the other hand	☐	☐
10. Dried hands with sterile towel correctly	☐	☐
11. Dropped towel in correct container or place	☐	☐
12. Held hands higher than elbows	☐	☐

Comments:

JOB SHEET #1

V. Checklist for using short-term scrub technique

		Performed Well	Needs Improvement
A.	Washed hands and arms well	☐	☐
B.	Cleaned nails with orange stick, using plenty of running water	☐	☐
C.	Scrubbed one hand and arm and then the other, using the following brush count: hands -- 20 strokes to nails, 10 strokes to fingers and surfaces of hands; arms — 10 strokes to below elbows	☐	☐
D.	Rinsed hands and arms and turned off faucet with towel, if hand controlled, or used foot control	☐	☐

Comments: ____

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PREPARATION AND CARE OF PREOPERATIVE
AND POSTOPERATIVE PATIENT
UNIT III

JOB SHEET #2--OPEN STERILE PACKS

I. Equipment

   A. Sterile packs of different sizes with needed instruments

   B. Assistant

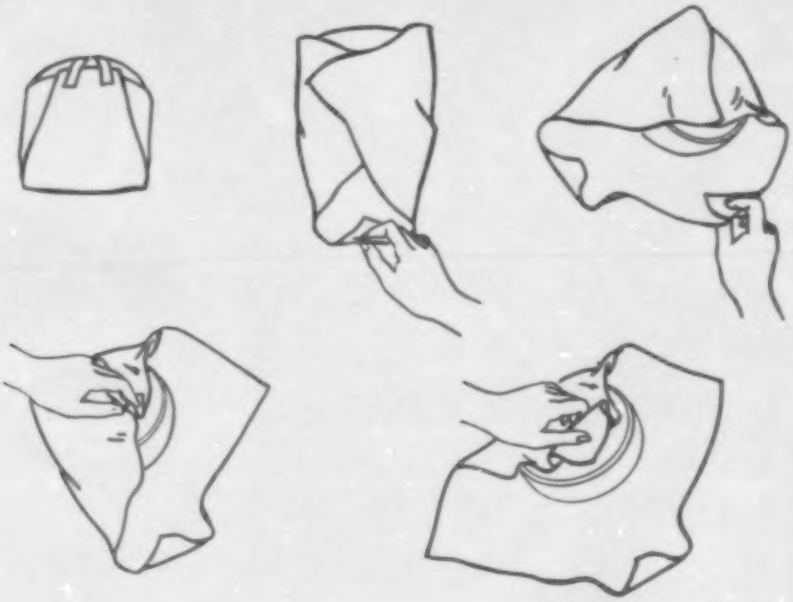
II. Procedure for large pack

   A. Place large pack to be opened on table

   B. Loosen fasteners

   C. Fold back one flap at a time, grasping the wrapper from outside so that fingers never touch the inside (Figure 10)

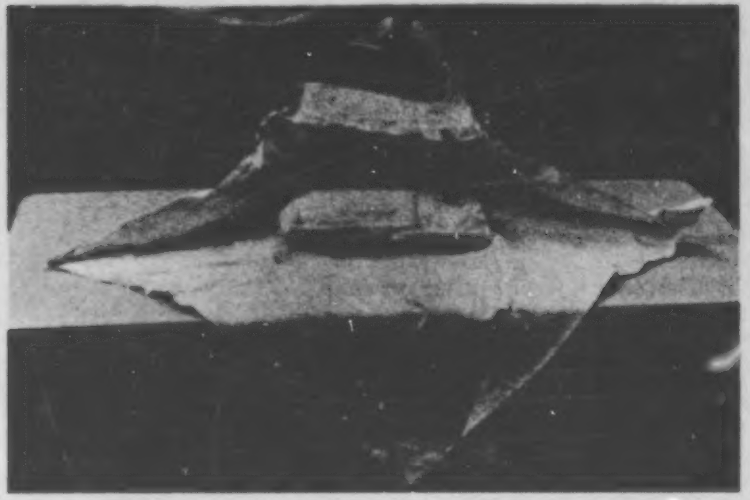
FIGURE 10



JOB SHEET #2

D. Hold pack so that last flap opened is toward you (Figure 11)

FIGURE 11



E. Use articles from pack as needed, or transfer to a sterile tray with transfer forceps or sterile gloves (Figure 12)

FIGURE 12

JOB SHEET #2

III. Procedure for a small pack

- A. Loosen fasteners
- B. Hold pack in one hand
- C. Open flaps one at a time with other hand
- D. Hold pack so that last flap opened is toward you
- E. Hand article to assistant wearing gloves, or transfer to a sterile tray with transfer forceps

JOB SHEET #2

III. Checklist for opening sterile packs

	Performed Well	Needs Improvement
A. Procedure for large pack		
1. Placed large pack to be opened on table and loosened fasteners	☐	☐
2. Folded back one flap at a time, grasping wrapper from outside so fingers never touched inside	☐	☐
3. Held pack so last flap was opened toward himself or herself	☐	☐
4. Used articles needed or transferred to sterile tray with forceps or sterile gloves	☐	☐
B. Procedure for small pack		
1. Loosened fasteners correctly	☐	☐
2. Held pack in one hand and opened flaps one at a time with other hand	☐	☐
3. Held pack so that last flap opened was toward himself or herself	☐	☐
4. Handed article to assistant wearing gloves, or transferred to a sterile tray with forceps	☐	☐

Comments: ____

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PREPARATION AND CARE OF PREOPERATIVE AND POSTOPERATIVE PATIENT
UNIT III

JOB SHEET #3–PUT ON STERILE GLOVES

I. Equipment

  A. Package of sterile gloves

  (NOTE: Gloves come in various sizes; select ones that fit properly.)

  B. Soap

  C. Brush

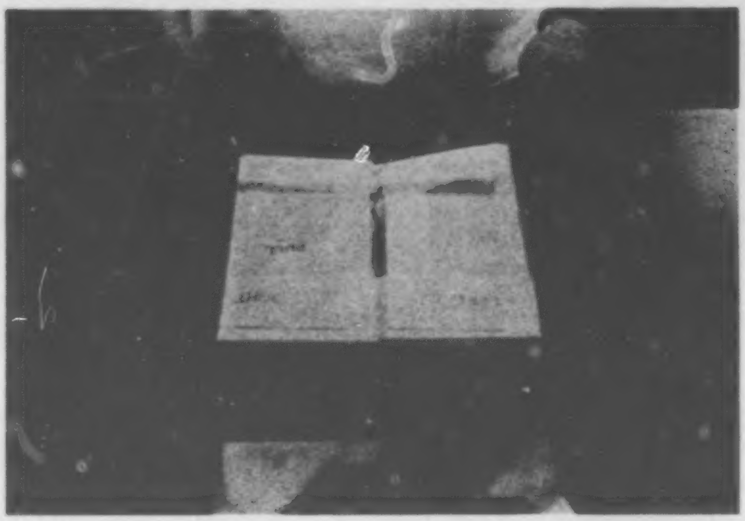
  D. Paper towels

II. Procedure

  A. Wash hands

  B. Open sterile-glove wrapper, touching only the outside (Figure 13)

FIGURE 13



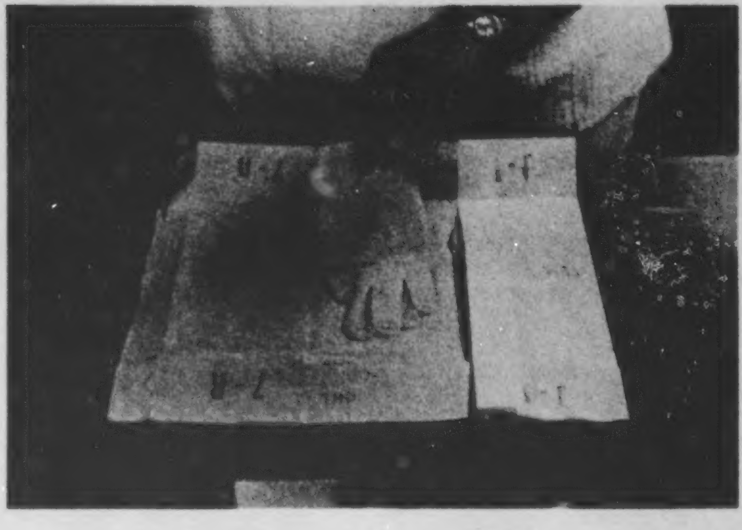
  C. Scrub hands for two minutes, using brush, soap, and water as needed

  D. Rinse and dry hands

JOB SHEET #3

E. Remove one glove from wrapper by grasping cuff on the fold (Figure 14)

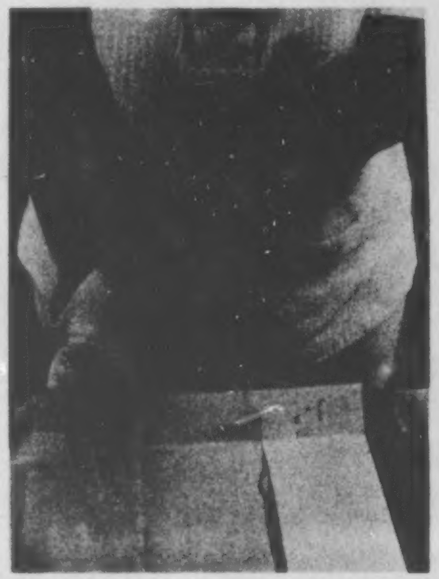
FIGURE 14



F. Put glove on by pulling on folded edge of cuff (Figure 15)

(NOTE: Do not touch outside of glove with fingers of the ungloved hand.)

FIGURE 15



JOB SHEET #3

G. Remove second glove from wrapper by slipping *gloved* fingers *inside* the folded cuff (Figure 16)

(NOTE: Do not touch gloved hand to outside of wrapper, which is unsterile.)

FIGURE 16

H. Pull on second glove, taking care not to touch outside of gloved fingers to ungloved hand (Figure 17)

FIGURE 17

I. Adjust fingers as necessary

JOB SHEET #3

III. Checklist for putting on sterile gloves

		Performed Well	Needs Improvement
A.	Washed hands correctly	☐	☐
B.	Opened sterile-glove wrapper, touching only outside	☐	☐
C.	Scrubbed hands for two minutes, using brush, soap, and water correctly	☐	☐
D.	Rinsed and dried hands	☐	☐
E.	Removed one glove from wrapper by grasping cuff on the fold	☐	☐
F.	Put glove on by pulling on folded edge of cuff	☐	☐
G.	Removed second glove from wrapper by slipping gloved fingers inside the folded cuff	☐	☐
H.	Pulled on second glove, taking care not to touch outside of gloved fingers to ungloved hand	☐	☐

Comments: ____

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PREPARATION AND CARE OF PREOPERATIVE AND POSTOPERATIVE PATIENT
UNIT III

JOB SHEET #4--PERFORM URINARY CATHETERIZATION

I. Equipment

   A. Nonsterile

      1. Bed protector
      2. Bath blanket or drape
      3. Washcloth and towel
      4. Soap and water
      5. Proper lighting

   B. Sterile catheterization set which usually includes the following

      (NOTE: When using a commercially prepared catheterization set, read the manufacturer's instructions.)

      1. Drapes
      2. Receptacle for urine
      3. Catheter, size 16 Fr.
      4. Cotton balls
      5. Antiseptic solution

         (NOTE: Ask patient if he or she has sensitivity to solution; if so, obtain another type.)

      6. Forceps
      7. Lubricant
      8. Specimen bottle with cap and label
      9. Gloves
      10. Clip or rubber band to fasten tubing to linens

II. Procedure for female catheterization

   A. Check physician's order

   B. Identify patient and explain procedure

   C. Check time the patient last voided

   D. Wash hands

JOB SHEET #4

E. Assemble equipment

F. Take equipment to patient's unit

G. Prepare the patient (Figure 18)

  1. Provide for privacy

  2. Replace top covers with bath blanket or drape

  3. Place patient in supine position

  4. Place bed protector under patient's hips

  5. Drape to expose perineal area

FIGURE 18

H. Adjust lighting

I. Wash hands

J. Instruct patient to bend knees and relax legs

K. Place catheter tray between patient's legs, six inches from perineum

JOB SHEET #4

L. Open wrapper of tray, using sterile technique; do not touch inside of tray (Figure 19)

FIGURE 19

M. Apply sterile gloves

N. Lift sterile drape off tray so that drape does not touch any contaminated areas

O. Unfold drape by placing hands on inside of drape with thumbs on outside; roll thumbs in as hands are turned in, so that drape will cover your sterile gloves (Figure 20)

FIGURE 20

JOB SHEET #4

P. Instruct patient to raise buttocks off bed as you slide drape under patient

Q. Instruct patient to lower buttocks slowly as you remove your gloved hands

R. Lift out sterile tray and place it on sterile drape (Figure 21)

FIGURE 21

S. Open packet of sterile antiseptic solution and pour over part of cotton balls in tray

T. Open packet of lubricant

U. Remove sterile catheter from tray, being careful not to let any part of catheter touch any contaminated areas

(NOTE: If this is a straight catheterization, the sterile container will need to be removed at this time to collect urine. If this is a continuous or in-dwelling catheter, the tubing and container will need to be removed from tray to be connected to catheter.)

V. Apply lubricant to tip of catheter; place in sterile tray, ready for insertion

JOB SHEET #4

W. Apply top drape so that perineum is uncovered by slit (Figure 22)

FIGURE 22

X. Separate labia with thumb and forefinger of one hand to expose the urinary meatus

(NOTE: This separation of the labia must be maintained until catheter is in place.)

Y. Cleanse meatus by wiping anteriorally to posteriorally on far side of the meatus with cotton ball and antiseptic solution; discard cotton ball

Z. Cleanse near side of meatus with second cotton ball and antiseptic solution; discard cotton ball

AA. Cleanse center of vestibule area with third cotton ball and antispetic solution; discard cotton ball

(NOTE: A dry cotton ball may be used to remove excess solution.)

BB. Pick up catheter and hold close to lubricated end with other hand

CC. Insert catheter into meatus, using a gentle motion, about 1 to 1 1/2 inches in female or until you see urine returning into the tubing

DD. Hold catheter in place by using the fingers that separated the labias

(NOTE: Withdraw catheter about one-half inch when flow stops, to be sure bladder is empty.)

EE. Collect specimen if needed at this time

FF. Pinch off catheter with one hand; withdraw smoothly with the other hand

JOB SHEET #4

GG. Cleanse and dry perineum

HH. Remove gloves, drapes, and equipment; dispose of properly

II. Make patient comfortable

JJ. Remove urine specimen, read the number of cubic centimeters collected; note color and any sediment; prepare to send to laboratory for study if needed; if not, discard in toilet

KK. Wash hands

LL. Report and record treatment including

1. Time
2. Procedure performed and purpose
3. Amount and appearance of urine
4. Patient's tolerance of procedure

III. Procedure for male catheterization

A. Check physician's order

B. Identify patient and explain procedure

C. Check time patient last voided

D. Wash hands

E. Assemble equipment

F. Take equipment to patient's unit

G. Prepare the patient

1. Provide privacy
2. Replace top covers with bath blanket or drape
3. Place patient in supine position
4. Wash external genitalia with soap and water; rinse well and dry
5. Place bed protector under patient's hips
6. Drape patient to expose the penis

   (NOTE: This can be done by using a special drape prepared for this purpose or by pushing the bath blanket in from one side to expose the penis.)

JOB SHEET #4

H. Adjust lighting

I. Wash hands

J. Place equipment in convenient place

K. Open set and proceed according to manufacturer's instructions

L. Prepare for catheterization

1. Place the sterile drape around the penile area
2. Hold the penis with one hand; pull back the foreskin on the penis and hold it back
3. Avoid touching the patient with the other hand as you complete the following steps
4. Use a cotton ball saturated with antiseptic solution to clean the glans penis; using a circular motion, start at the tip and gradually work back
5. Discard cotton ball and repeat the procedure twice

   (NOTE: A dry cotton ball may be used to remove excess solution.)
6. Discard cotton ball
7. Continue holding the penis with one hand

M. Pick up the catheter approximately four inches from the tip

N. Lubricate the tip of the catheter

O. Hold the penis erect with one hand while inserting the catheter with the other hand (Figure 23)

FIGURE 23

JOB SHEET #4

P. Insert the catheter, using gentle but steady pressure

(NOTE: A slight resistance may be felt as the prostate gland and the bladder sphincter muscle are reached, but gentle pressure should be sufficient to push the catheter past. If you cannot insert the catheter with gentle pressure, stop and ask the physician or charge nurse for assistance.)

Q. Insert the catheter, usually about seven or eight inches, until urine begins to flow

R. Allow the urine to flow into the collecting basin

(NOTE: Save sterile urine specimen if one is ordered.)

S. Remove the catheter with one gentle pull when the urine ceases to flow

T. Pull the foreskin back over the tip of the penis if patient has not been circumcised

(NOTE: If the foreskin remains behind the tip of the penis, it will cut off the blood supply and the penis will swell. If this swelling is not observed and relieved, gangrene of the penis may occur.)

U. Complete care of patient

1. Remove bed protector and bath blanket
2. Replace top covers
3. Provide for patient's comfort

V. Remove and care for equipment as required--Discard disposable equipment

W. Wash hands

X. Report and record procedure, including the following

1. Time
2. Procedure performed
3. Amount and appearance of urine

JOB SHEET #4

III. Checklist for performing urinary catheterization

	Performed Well	Needs Improvement
A. Procedure for female catheterization		
1. Checked physicians's order	☐	☐
2. Identified patient and explained procedure; checked time of patient's last voiding	☐	☐
3. Washed hands correctly	☐	☐
4. Assembled equipment and took to patient's unit	☐	☐
5. Prepared the patient by providing privacy; replacing top covers with bath blanket or drape; placed patient in supine position; placed bed protector under patient's hips; draped to expose perineal area	☐	☐
6. Adjusted lighting	☐	☐
7. Washed hands correctly	☐	☐
8. Instructed patient to bend knees and relax legs	☐	☐
9. Placed catheter tray between patient's legs, 6 inches from perineum	☐	☐

Comments: ______________________________

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JOB SHEET #4

		Performed Well	Needs Improvement
10.	Opened wrapper of tray, using sterile technique; did not touch inside of tray	☐	☐
11.	Applied sterile gloves correctly	☐	☐
12.	Lifted sterile drape off tray so that the drape did not touch any contaminated areas	☐	☐
13.	Unfolded drape by placing hands on inside of drape with thumbs on outside; rolled thumbs in as hands were turned in so that drape would cover the sterile gloves	☐	☐
14.	Instructed patient to raise buttocks as the drape was placed under patient	☐	☐
15.	Instructed patient to lower buttocks slowly as he/she removed gloved hands	☐	☐
16.	Lifted out sterile tray and placed it on sterile drape	☐	☐
17.	Opened packet of sterile aseptic solution and poured over part of cotton balls in tray	☐	☐

Comments: ____

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JOB SHEET #4

		Performed Well	Needs Improvement
18.	Opened packet of lubricant	☐	☐
19.	Removed sterile catheter from tray; did not let any part of catheter touch any contaminated areas	☐	☐
20.	Applied lubricant to tip of catheter and placed in sterile tray	☐	☐
21.	Applied top drape so that perineum was uncovered by slit	☐	☐
22.	Separated labia with thumb and forefinger of one hand to expose urinary meatus	☐	☐
23.	Cleansed meatus by wiping anteriorally to posteriorally on far side of meatus with cotton ball and antiseptic solution; discarded cotton ball properly	☐	☐
24.	Cleansed near side of meatus with second cotton ball and antiseptic solution; discarded cotton ball properly	☐	☐
25.	Cleansed center of vestibule area with third cotton ball and antiseptic solution; discarded cotton ball	☐	☐
26.	Picked up catheter, holding close to lubricated end with other hand	☐	☐

Comments: ____

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JOB SHEET #4

		Performed Well	Needs Improvement
27.	Inserted catheter into meatus, using a gentle motion, about 1 to 1½ inches or until urine was seen	☐	☐
28.	Held catheter in place by using fingers that separated labias	☐	☐
29.	Collected specimen if needed	☐	☐
30.	Pinched off catheter with one hand; withdrew smoothly with other hand	☐	☐
31.	Cleansed and dried perineum	☐	☐
32.	Removed gloves, drapes, and equipment; disposed of properly	☐	☐
33.	Made patient comfortable	☐	☐
34.	Removed urine specimen; read number of cubic centimeters collected, noted color and sediment; sent to lab if needed, if not, discarded	☐	☐
35.	Washed hands	☐	☐

Comments: ____

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JOB SHEET #4

	Performed Well	Needs Improvement
36. Reported and recorded treatment including		
a. Time	☐	☐
b. Procedure performed and purpose	☐	☐
c. Amount and appearance of urine	☐	☐
d. Patient's tolerance of procedure	☐	☐
B. Procedure for male catheterization	☐	☐
1. Checked physician's order	☐	☐
2. Identified patient and explained procedure	☐	☐
3. Checked time patient last voided	☐	☐
4. Washed hands correctly	☐	☐
5. Assembled equipment; took to patient's unit	☐	☐

Comments: ______________________________

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JOB SHEET #4

		Performed Well	Needs Improvement
6.	Prepared the patient by providing privacy, replaced top covers with bath blanket or drape, placed patient in supine position, washed external genitalia with soap and water; rinsed well and dried; placed bed protector under patient's hips; and draped patient to expose penis	☐	☐
7.	Adjusted lighting	☐	☐
8.	Washed hands correctly	☐	☐
9.	Placed equipment in convenient place	☐	☐
10.	Opened set and proceeded according to manufacturer's instructions	☐	☐
11.	Placed sterile drape around penile area	☐	☐
12.	Held penis with one hand; pulled back foreskin and held it back	☐	☐
13.	Used a cotton ball saturated with antiseptic solution to clean glans penis; using circular motion, started at tip and gradually worked back	☐	☐
14.	Discarded cotton balls correctly; repeated above procedure twice	☐	☐

Comments: ____

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JOB SHEET #4

		Performed Well	Needs Improvement
15.	Continued holding penis with one hand; picked up catheter approximately 4 inches from the tip with the other hand	☐	☐
16.	Lubricated the tip of the catheter	☐	☐
17.	Held penis erect with one hand while inserting catheter with other hand, using gentle but steady pressure	☐	☐
18.	Inserted catheter until urine began to flow	☐	☐
19.	Allowed urine to flow into sterile basin	☐	☐
20.	Removed the catheter with one gentle pull when urine ceased flowing	☐	☐
21.	Pulled foreskin back over tip of penis if patient has not been circumcised	☐	☐
22.	Completed care of patient by removing bed protector and bath blanket, replacing top covers, and providing for comfort	☐	☐
23.	Removed and cared for equipment as required; discarded disposable equipment properly	☐	☐
24.	Washed hands correctly	☐	☐
25.	Reported and recorded procedure, including time, procedure performed, and appearance and amount of urine	☐	☐

Comments: ____

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PREPARATION AND CARE OF PREOPERATIVE AND POSTOPERATIVE PATIENT
UNIT III

JOB SHEET #5--APPLY DRESSINGS AND BINDERS

(NOTE: Frequency of changing dressings is influenced by the type of wound, amount of drainage, physician's preference, and the condition of dressing.)

I. Equipment for dressings

- A. Dressings

  (NOTE: Choose the appropriate dressing for the type of area to be covered, or for the type and size of wound.)

- B. Tape

  EXAMPLES: Paper, adhesive, nylon

- C. Scissors (bandage or straight edge)
- D. Cotton balls or cotton swabs for medication
- E. Container for soiled dressings

II. Procedure for self-adhering bandages

(NOTE: These bandages may have gauze pads, with or without medication, plus adhesive-tape strips for securing to area. Many sizes and shapes can be purchased to hold a dressing in place, immobilize a body part, support an area, or apply pressure.)

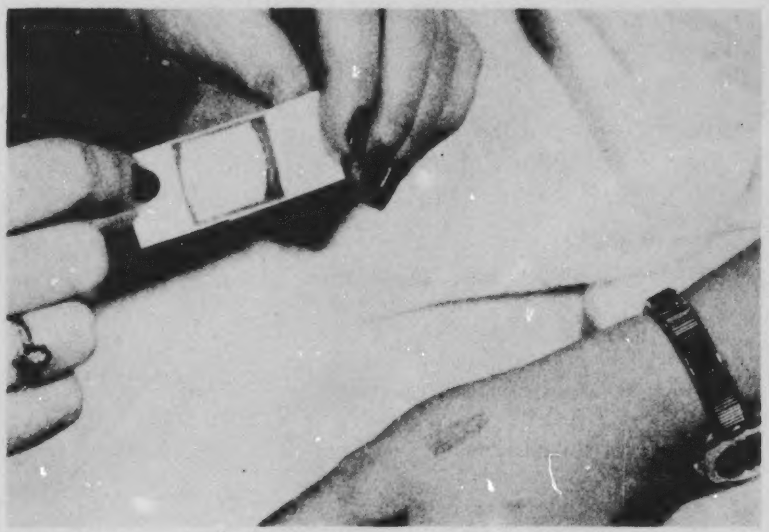
- A. Wash hands
- B. Assemble equipment
- C. Identify patient and explain procedure
- D. Make sure area to be covered is clean and dry
- E. Apply medication, if indicated, and other types of dressing, if needed

JOB SHEET #5

F. Grasp edges of the paper covering and pull back to expose the dressing (Figure 24)

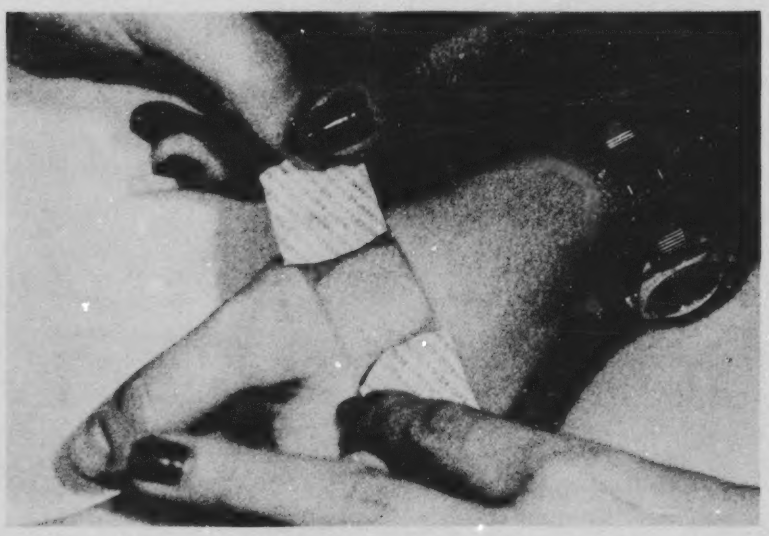
(CAUTION: Do not touch the sterile pad with your hands or let it touch your uniform or any other object.)

FIGURE 24



G. Place gauze pad over wound (Figure 25)

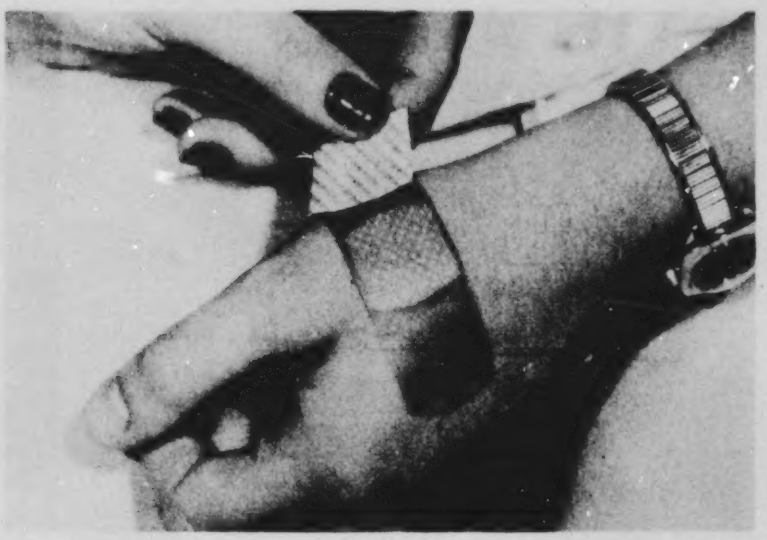
FIGURE 25



JOB SHEET #5

H. Holding one side firmly, peel off paper, using gentle pressure to apply adhesive strip to skin (Figure 26)

FIGURE 26



I. Peel off rest of paper, applying other side of adhesive to skin

(CAUTION: Do not apply too tightly, or circulation will be impaired.)

(NOTE: These types of bandages usually have a type of nonsticky substance over the gauze so that bandage will not stick to the wound and cause discomfort when removed.)

III. Procedure for roller bandages

(NOTE: A roller-type bandage should fasten securely over a dressing, but not tightly enough to interfere with circulation. Be sure to check for swelling, changes of color, and coldness of tips of fingers or toes; listen for complaints of numbness or tingling.)

A. Circular bandaging

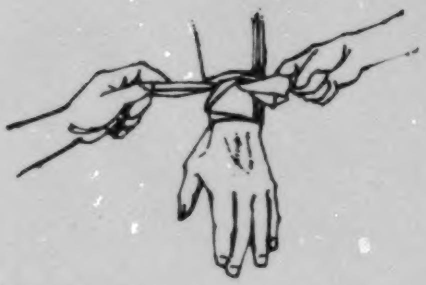
(NOTE: Gauze, cloth, or elastic wrap may be used to secure dressing.)

1. Position dressing and anchor the bandage
2. Wrap the area by encircling each layer with the next on top

JOB SHEET #5

3. Secure with tape, pins, or clips, or split bandage and tie a knot (Figure 27)

FIGURE 27

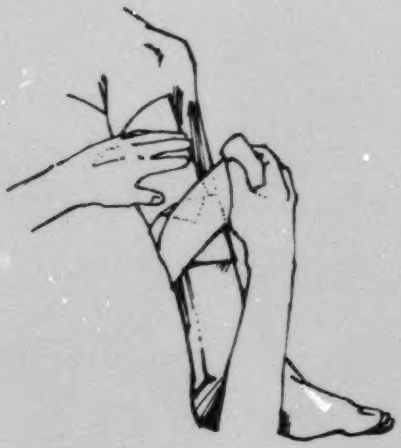


B. Spiral bandaging

(NOTE: Gauze, cloth, or elastic wrap may be used to secure dressing.)

1. Anchor bandage over dressing (Figure 28)

FIGURE 28

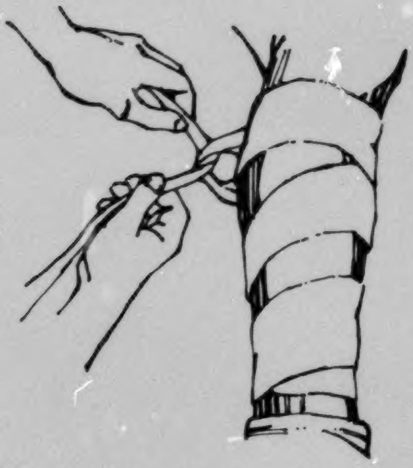


2. Encircle the area by making spiral turns of the bandage, moving around the limb until dressing is covered

JOB SHEET #5

3. Secure the bandage by tying it off if possible; this makes it more supportive than tape or clips; if using an elastic wrap, clips can be used effectively (Figure 29)

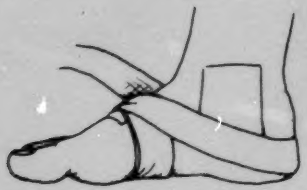
FIGURE 29



C. Figure-eight bandage, for ankle

1. Position the bandage end under the instep of the foot and make two or three additional turns around the foot (Figure 30)

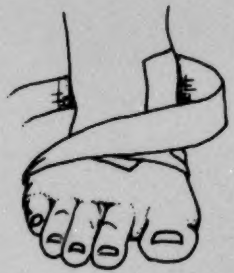
FIGURE 30



JOB SHEET #5

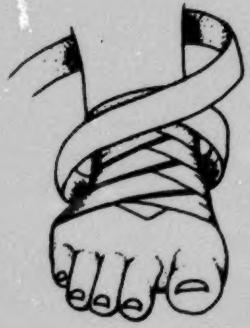
2. Bring the bandage up across the foot, then around the ankle, downward across the front of the foot, and across under the arch (Figure 31)

FIGURE 31



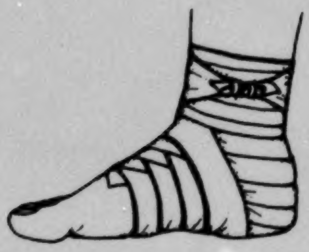
3. Make several figure-eight turns, each turn overlapping the previous one by approximately two-thirds the width of the bandage; to give more support, make two occasional turns around the ankle (Figure 32)

FIGURE 32



4. Tie off ends, or use clips with elastic bandage (Figure 33)

FIGURE 33



(NOTE: This type of bandage is effective for ankles and wrists. It is quite supportive to the injured limb.)

JOB SHEET #5

IV. Procedure for sterile dressings

(NOTE: This is one method to use in sterile dressings. The procedure you use will depend on your hospital's techniques, physician's preference, and the supplies you have to use.)

A. Identify patient and explain procedure

B. Clear bedside stand and overbed table of articles; wash and dry

C. Place dressing equipment on bedside stand

D. Wash your hands

E. Position patient for the procedure and drape to expose the incisional site, but do not overexpose the patient

F. Place sterile drape on the overbed table, and place sterile supplies on it in order of use

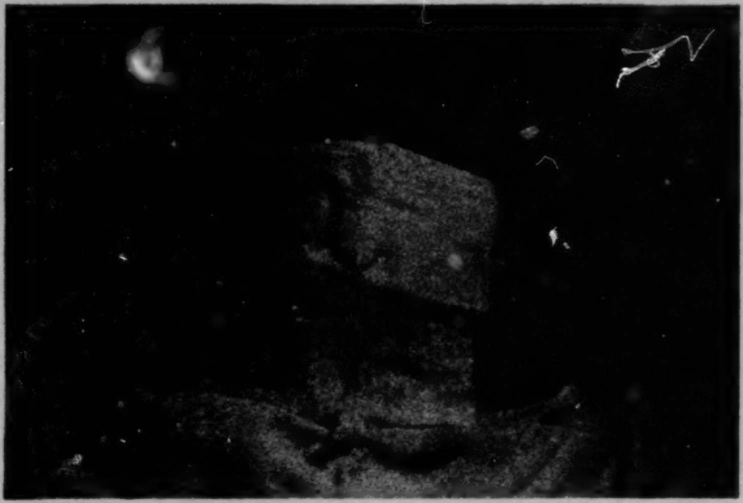
G. Set up the disposable plastic bag at the foot of the bed or place it in a wastebasket close by

H. Pour sterile solution to be used in cleaning the wound ino the sterile cup

I. Place clean underpad beneath the patient in the area of the incision site

J. Loosen the old tape gently, pulling toward the wound on each side (Figure 34)

FIGURE 34



K. Open and put on a pair of sterile gloves

JOB SHEET #5

L. Loosen and remove soiled dressings; gently remove each one, being careful not to dislodge drain if present (Figure 35)

FIGURE 35

(NOTE: If dressings have adhered to incision, sterile saline can be used to help loosen them.)

M. Discard dressings, noting the amount and character of the drainage

N. Observe the wound and the drain site

(NOTE: Watch for signs of infection, dehiscence, or evisceration.)

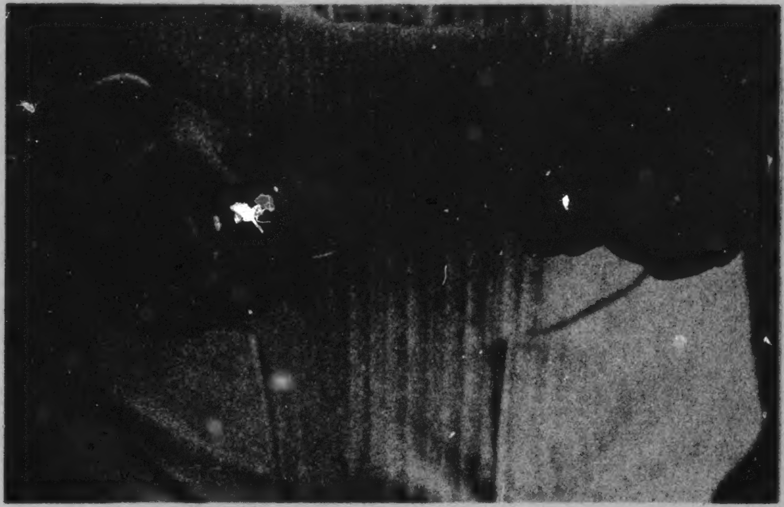
O. Remove gloves

P. Open the second pair of gloves, and glove only your dominant hand

JOB SHEET #5

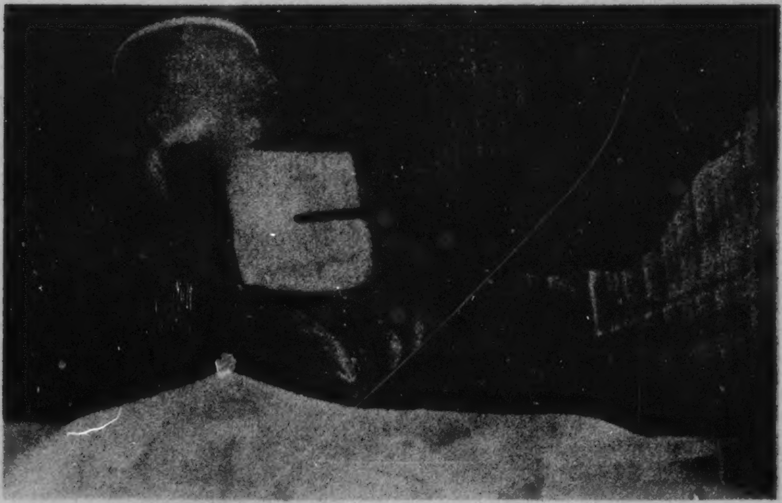
Q. Pick up the forceps by the distal end and transfer them to the ungloved hand, making sure to hold them by the proximal end (Figure 36)

FIGURE 36



R. Fold a 4" x 4" gauze sponge in quarters, with the gloved hand; grasp it with the forceps, with the folded edge facing outwards (Figure 37)

FIGURE 37

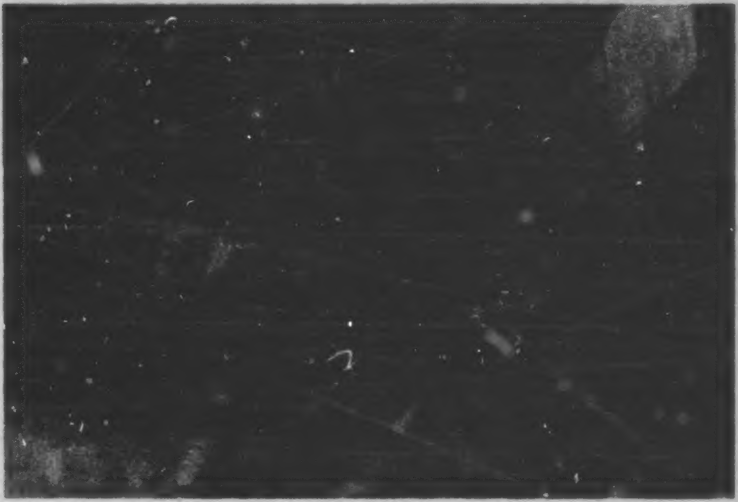


JOB SHEET #5

S. Dip the sponge into the solution cup and wet, but do not oversaturate (Figure 38)

(CAUTION: Hold forceps and sponge downward at all times so that solution does not flow up the forceps.)

FIGURE 38



T. Cleanse wound, using single strokes, with one sponge per stroke; begin at the center of the suture line and stroke toward the end (Figure 39)

(NOTE: Remember to discard each sponge in the plastic bag after use.)

FIGURE 39

JOB SHEET #5

U. Clean around the drain site if there is one by moving the sponge in a circular motion (Figure 40)

FIGURE 40

V. Discard forceps, if disposable, along with last sponge into plastic bag

W. Put other sterile glove on your ungloved hand; both hands should now be sterile

X. Place a nonadhering dressing on the suture line; then place two unfolded 4" x 4" dressings, one on top of the other, over the nonadhering dressing (Figure 41)

FIGURE 41

JOB SHEET #5

Y. Place four 4" x 4" precut drain sponges around the drain with two pointing in one direction and two in the opposite direction if drain is present, then two folded 4" x 4" dressings over the drain (Figure 42)

(NOTE: Direct the drain away from the incision site.)

FIGURE 42

Z. Place larger dressing over the primary dressings at the incision and drain sites (Figure 43)

FIGURE 43

JOB SHEET #5

AA. Remove the gloves and discard them

BB. Place two parallel strips of tape across the dressing to secure it (Figure 44)

FIGURE 44

CC. Make patient comfortable

DD. Remove any dressings from room and dispose of properly

EE. Record the dressing change and your observations including the following

1. Time
2. Appearance of incision, drain area, drainage amount, color, odor, and consistency
3. Medication used and where applied

JOB SHEET #5

V. Apply binders

A. T-binder

(NOTE: The T-binder is used to hold rectal or perineal dressings in place. The binder for the male has a split strap through the middle to hold scrotum more securely in place.)

1. Place band around patient's waist (Figure 45)
2. Bring the strap or straps up through the legs and under the perineum; pin through the band and strap at the midline (Figure 46)

FIGURE 45

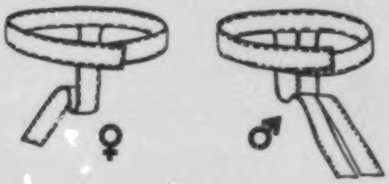
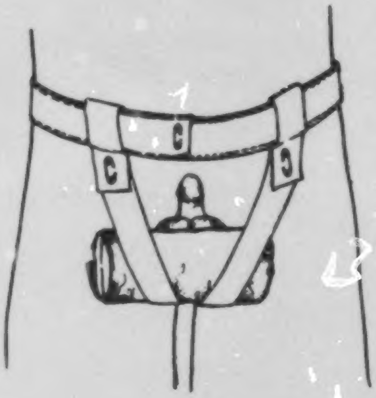


FIGURE 46



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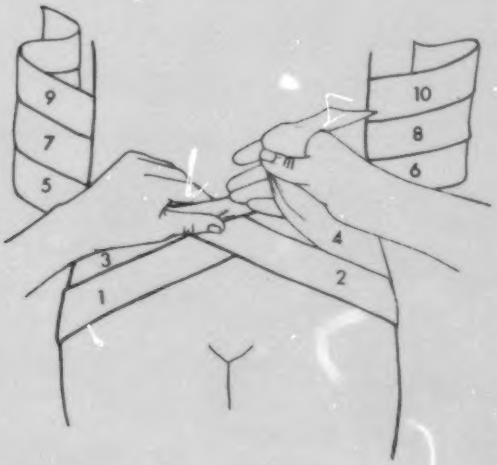
JOB SHEET #5

B. Scultetus (many-tailed binder) (Figure 47)

1. Place binder under patient with straps lying loose on each side
2. Bring one strap over across the abdomen and pin it to the opposite strap, starting with the bottom straps
3. Alternate opposite straps until you reach the last one
4. Bring the last one around the waist and fasten

FIGURE 47



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JOB SHEET #5

C. Montgomery straps (Figure 48)

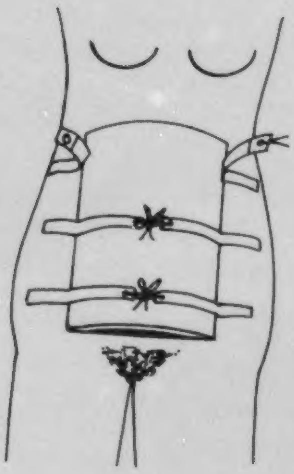
(NOTE: Straps to secure dressings that must be changed frequently are available commercially. But, if necessary, they can be made out of adhesive or heavy synthetic tape that has been doubled with a hole made in the end, and applied to the skin on either side of the incision.)

1. Apply straps to either side of the incision area

   (NOTE: It may be necessary to shave area before applying.)

2. Change dressing as needed
3. Bring straps over dressing, tie loosely with gauze ties

FIGURE 48



JOB SHEET #5

III. Checklist for applying dressings and binders

	Performed Well	Needs Improvement
A. Procedure for self-adhering bandages		
1. Washed hands correctly	☐	☐
2. Assembled equipment	☐	☐
3. Identified patient and explained procedure	☐	☐
4. Made sure area to be covered was clean and dry	☐	☐
5. Applied medication, if indicated, and other types of dressings, if needed	☐	☐
6. Grasped edges of the paper covering and pulled back to expose the dressing	☐	☐
7. Placed gauze pad over wound	☐	☐
8. Held one side firmly, peeled off paper, using gentle pressure to apply adhesive strip to skin	☐	☐
9. Peeled off rest of paper, applying other side of adhesive to skin	☐	☐

Comments: ____

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JOB SHEET #5

	Performed Well	Needs Improvement
B. Procedure for roller bandage		
1. Circular bandaging		
a. Positioned dressing and anchored the bandage	☐	☐
b. Wrapped the area by encircling each layer with the next on top	☐	☐
c. Secured with tape, pins, or clips, or spilt bandage and tied a knot	☐	☐
2. Spiral bandaging		
a. Anchored bandage over dressing	☐	☐
b. Encircled the area by making spiral turns of the bandage, moving around the limb until dressing is covered	☐	☐
c. Secured the bandage by tying it off, if possible; or using clips if elastic wrap	☐	☐
3. Figure-eight bandage, for ankle		
a. Positioned the bandage end under the instep of the foot and made two or three additional turns around the foot	☐	☐

Comments: ____

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JOB SHEET #5

		Performed Well	Needs Improvement
b.	Brought the bandage up across the foot; then around the ankle, downward across the front of the foot, and across under the arch	☐	☐
c.	Made several figure-eight turns, each turn overlapping the previous one by approximately two-thirds the width of the bandage; to give more support, made two occasional turns around the ankle	☐	☐
d.	Tied off ends, or used clips with elastic bandage	☐	☐
C.	Procedure for sterile dressings		
1.	Identified patient and explained procedure	☐	☐
2.	Cleared bedside stand and over-bed table; washed and dried; placed equipment on bedside stand	☐	☐
3.	Washed hands correctly	☐	☐
4.	Positioned patient for procedure and draped to expose incisional area; did not overexpose patient	☐	☐
5.	Placed sterile drape on overbed table and placed sterile supplies on it in order of use	☐	☐

Comments: ____

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JOB SHEET #5

		Performed Well	Needs Improvement
6.	Set up disposable plastic bag at the foot of the bed or placed it in a wastebasket close by	☐	☐
7.	Poured sterile solution to be used in cleaning the wound into the sterile cup	☐	☐
8.	Placed clean underpad beneath patient in area of incision site	☐	☐
9.	Loosened the old tape gently, pulling toward the wound on each side	☐	☐
10.	Opened and put on sterile gloves, using correct technique	☐	☐
11.	Loosened and removed soiled dressings; gently removed each one, being careful not to dislodge drain if present	☐	☐
12.	Discarded dressings, noting the amount and character of the drainage	☐	☐
13.	Observed the wound and drain site	☐	☐
14.	Removed gloves; put on sterile glove of dominant hand	☐	☐
15.	Picked up forceps by distal end and transferred them to ungloved hand, making sure to hold them by the proximal end	☐	☐

Comments:

JOB SHEET #5

		Performed Well	Needs Improvement
16.	Folded a 4" × 4" gauze sponge in quarters, with the gloved hand; grasped it with the forceps, with folded edge facing outwards	☐	☐
17.	Dipped the sponge into the solution cup to wet, but did not oversaturate	☐	☐
18.	Cleansed wound, using single strokes, with one sponge per stroke; beginning at the center of suture line and stroking toward the end	☐	☐
19.	Cleansed around the drain site if present by moving the sponge in a circular motion	☐	☐
20.	Discarded disposable forceps along with last sponge into plastic bag	☐	☐
21.	Put other sterile glove on ungloved hand	☐	☐
22.	Placed a nonadhering dressing on the suture line; then placed two unfolded 4" × 4" dressings, one on top of the other, over the nonadhering dressing	☐	☐
23.	Placed four 4" × 4" precut drain sponges around drain with two pointing in one direction and two pointing in the opposite direction if drain is present, then two folded 4" × 4" dressings over the drain	☐	☐
24.	Placed larger dressing over the primary dressing at the incision and drain sites	☐	☐
25.	Removed and discarded gloves	☐	☐

Comments:

JOB SHEET #5

			Performed Well	Needs Improvement
	26.	Placed two parallel strips of tape across the dressing to secure it	☐	☐
	27.	Made patient comfortable	☐	☐
	28.	Removed any dressings from room and disposed of properly	☐	☐
	29.	Recorded the dressing change and observations, including time, appearance of incision, drain area, drainage amount, color, odor, and consistency; medication used and where applied	☐	☐
D.	T-binders			
	1.	Placed band around patient's waist	☐	☐
	2.	Brought strap or straps up through legs and under the perineum; pinned through the band and strap at the midline	☐	☐
E.	Scultetus binder			
	1.	Placed binder under patient with straps lying loose one each side	☐	☐
	2.	Brought one strap over across the abdomen and pinned it to the opposite strap, starting with the bottom straps	☐	☐
	3.	Alternated opposite straps until the last one was brought up around waist and fastened	☐	☐

Comments: ____

____

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____

JOB SHEET #5

		Performed Well	Needs Improvement
F.	Montgomery straps		
1.	Applied straps to either side of the incision area	☐	☐
2.	Changed dressing as needed	☐	☐
3.	Brought straps over dressing and tied loosely with gauze ties	☐	☐

Comments: ____

____

____

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____

PREPARATION AND CARE OF PREOPERATIVE AND POSTOPERATIVE PATIENT
UNIT III

TEST

NAME________________________________ SCORE______________

1. Match terms associated with preparation and care of the preoperative and postoperative patient to their correct definitions. Write the correct numbers in the blanks. Terms and definitions are continued on the next page.

_____ a. Pertaining to, or containing blood

_____ b. Artificial replacement or enhancement of a body part

_____ c. More extensive procedure; usually calls for a general anesthetic that may result in a longer postrecovery stage

_____ d. Prefix meaning *before*

_____ e. Swelling of the tissues due to collection of fluid; characterized by preservation for a short time of indentations on the skin made by pressing with the fingers

_____ f. Marred or scarred appearance

_____ g. Loss of sensation in a small area

_____ h. Less extensive procedure; may call for a local or regional anesthetic and a shorter recovery period

_____ i. Depressed condition of many body functions due to failure of enough blood to circulate through the body

_____ j. Containing both serum and blood

_____ k. Pertaining to an area or part

_____ l. Room or area with special equipment for the care of a patient immediately following surgery

_____ m. Inflammation of a vein associated with a clot

_____ n. Planned anatomic alteration of the human organism, designed to arrest, alleviate, or eradicate some pathological process, or to reconstruct

1. Local anesthesia
2. Surgery
3. Minor surgery
4. Sanguineous
5. Prosthesis
6. Thrombophlebitis
7. Regional
8. Disfigurement
9. Pre
10. Shock
11. Pitting edema
12. Major surgery
13. Recovery room
14. Serosanguineous

TEST

______ o. Loss of sensation with or without unconsciousness

______ p. Loss of sensation over entire body

______ q. Prefix meaning *after* or *behind*

______ r. Lowering the temperature of a part of the body or of the entire body

______ s. Vomiting of blood

______ t. Protrusion of intestines through an abdominal wound; removal of the internal contents of a body

______ u. Abnormal internal or external discharge of blood

______ v. Collapse or airless condition of the lung

______ w. Separation of all the layers of an incision or wound

15. General anesthesia
16. Anesthesia
17. Post
18. Hematemesis
19. Hypothermic anesthesia
20. Atelectasis
21. Hemorrhage
22. Dehiscence (wound)
23. Evisceration

2. Decribe preoperative procedures to complete when patient is admitted for surgery.

a. Preoperative orders--______________________________

____

____

____

____

b. Permission for surgery--______________________________

____

____

____

____

____

____

TEST

c. Physical examination--

d. Preoperative teaching--

e. Care of valuables--

TEST

f. Personal care--____

g. Documentation of patient records--__________________________

h. Preparation of bed and unit--_______________________________

TEST

3. Describe ways in which nurse may give support when patient has fears related to surgical treatment.

   a. Fear of the unknown--

   b. Fear of death, disfigurement--

   c. Fear of pain--

   d. Fear of being alone, helpless, and dependent--

TEST

4. Distinguish among types of anesthesia. Write an "R" in the blanks before *regional* types, a "G" in the blanks before *general* types, or an "H" in the blanks before *hypothermic* types.

______a. Caudal

______b. Inhalation

______c. Surface-induced

______d. Spinal

______e. Intravenous

______f. Rectal

______g. Internal cooling

______h. Local

______i. Systemic

5. State nursing responsibilities while performing postoperative care.

a. Immediate (recovery room)

1) ______________________________

2) ______________________________

3) ______________________________

4) ______________________________

5) ______________________________

b. Recovery in room

1) ______________________________

2) ______________________________

3) ______________________________

4) ______________________________

5) ______________________________

6) ______________________________

7) ______________________________

8) ______________________________

9) ______________________________

TEST

10) ____________________

11) ____________________

12) ____________________

6. List common types of equipment that may be used in the postoperative period.

   a. ____________________

   b. ____________________

   c. ____________________

   d. ____________________

7. List symptoms of postoperative complications.

   a. Hemorrhage

      1) ____________________

      2) ____________________

      3) ____________________

      4) ____________________

   b. Shock

      1) ____________________

      2) ____________________

      3) ____________________

      4) ____________________

      5) ____________________

      6) ____________________

      7) ____________________

      8) ____________________

   c. Thrombophlebitis

      1) ____________________

      2) ____________________

      3) ____________________

      4) ____________________

TEST

d. Hypostatic pneumonia

1) ______________________________

2) ______________________________

3) ______________________________

e. Wound infection

1) ______________________________

2) ______________________________

3) ______________________________

4) ______________________________

5) ______________________________

6) ______________________________

f. Gastrointestinal disturbance

1) ______________________________

2) ______________________________

3) ______________________________

4) ______________________________

5) ______________________________

6) ______________________________

g. Wound dehiscence and/or evisceration

1) ______________________________

2) ______________________________

3) ______________________________

4) ______________________________

5) ______________________________

6) ______________________________

TEST

h. Infiltration of intravenous infusion

1) ____________________

2) ____________________

3) ____________________

8. Describe nursing actions to take when symptoms of postoperative complications occur.

a. Hemorrhage-- ____________________

b. Shock-- ____________________

c. Thrombophlebitis-- ____________________

TEST

d. Hypostatic pneumonia--________________________________

____

____

e. Wound infection--________________________________

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f. Gastrointestinal disturbance--________________________________

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g. Wound dehiscence and/or evisceration--________________________________

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h. Infiltration of intravenous infusion--________________________________

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TEST

9. Match terms associated with surgical asepsis to their correct definitions. Write the correct numbers in the blanks.

______ a. Surgical instrument with two opposing blades or limbs controlled by handles

______ b. Destruction of infection-producing organisms

______ c. Apparatus for sterilizing objects, using steam under pressure

______ d. All gross contamination and many microorganisms have been removed

______ e. Procedures used to protect the patient and his or her environment from the transmission of disease-producing organisms from one person to another

______ f. Destruction of all microorganisms on a substance by exposure to chemical or physical agents

______ g. Procedures used to keep objects and areas sterile

______ h. Free of all microorganisms and spores

1. Disinfection
2. Forceps
3. Autoclave
4. Surgical asepsis
5. Medical asepsis
6. Sterilization
7. Clean (as applied to medical asepsis)
8. Sterile (as applied to surgical technique)

10. Select from the following list reasons for maintaining aseptic techniques. Write an "X" in the blank before each correct answer.

______ a. It is illegal not to do

______ b. Failure to be meticulous is not readily detectable

______ c. Due to the indiscriminate use of antibiotics, many strains of bacteria are becoming resistant to antibiotics

______ d. Organisms can be carried from one patient to another on improperly cleaned utensils

______ e. Some bacteria can live for months or years in dust and bedding

______ f. Many persons, such as newborn infants, debilitated patients, and patients with wounds, are susceptible to infectious organisms

______ g. Some persons can carry bacteria to others in the nasal passages and on the skin without showing any clinical symptoms or being aware that they are carriers

______ h. Housekeeping will not have to spend as much time cleaning if aseptic techniques are maintained

TEST

11. Select from the following list general principles of surgical asepsis. Write an "X" in the blank before each correct answer.

_____a. Begin with clean hands and use sterile gloves

_____b. Never return materials to a sterile container

_____c. Unused, opened sterile packs can be considered sterile for only eight hours

_____d. Know that skin can never be sterile, only clean

_____e. Consider an article unsterile if there is any doubt at all about its sterility

_____f. Open sterile packs only when you are ready to use

_____g. Establish a sterile field or area and maintain the sterility

_____h. One may pour only sterile solution onto a sterile field to moisten area

_____i. Handle sterile equipment only with sterile equipment

_____j. It is permissible to use sterile supplies that have been in another patient's room

_____k. Open sterile packs so that you keep the inside of the wrapper and contents sterile

12. List methods of sterilization.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

TEST

13. Match terms associated with urinary catheterization to their correct definitions. Write the correct numbers in the blanks.

_____a. Urine retained in the bladder after voiding

_____b. Enlarged from internal pressure

_____c. Laboratory test to determine which medication weakens or destroys a cultured microorganism

_____d. Occurring at intervals

_____e. Washing of a body cavity with water or other fluid

_____f. Double-lumen or triple-lumen catheter with an inflatable balloon near the tip

_____g. Inability to empty the bladder

_____h. Insertion of a catheter through the urethra into the urinary bladder

_____i. Inability of the kidneys to secrete urine

_____j. Growth of microorganisms in a special substance in the laboratory

_____k. External opening of the urethra

_____l. Tube for removing or injecting fluids

1. Intermittent
2. Catheterization
3. Catheter
4. Irrigation
5. Culture
6. Urethral meatus
7. Sensitivity
8. Urinary retention
9. Foley
10. Residual
11. Distended
12. Urinary suppression

14. State purposes of urinary catheterization.

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

TEST

15. State factors to consider when performing a urinary catheterization.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

16. List information that should be charted in urinary catheterization.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

17. Select from the following list reasons for applying dressings. Write an "X" in the blank before each correct answer.

_____a. To prevent contamination

_____b. To protect wound from further injury

_____c. To prevent patient from looking at incision

_____d. To relieve nurse of extra time spent at bedside

_____e. To absorb drainage

_____f. To apply medication

_____g. To apply pressure

18. Arrange in order steps to follow when applying a dressing. Write a "1" before the first step, a "2" before the second step, and so on.

_____a. Check dressing to determine what is needed to replace it

_____b. Dispose of old dressing properly

_____c. Wash hands or apply sterile gloves, depending on the condition of the wound

_____d. Wash hands and document the change, including appearance of wound and what type of dressing was applied

TEST

______e. Check physician's orders

______f. Gather all equipment and assemble it at bedside before removing soiled dressing

______g. Identify patient and explain procedure

______h. Change dressing and secure clean dressing

(NOTE: Test questions 19 and 20 list the assignment and job sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

19. Plan care for surgical patients.

20. Demonstrate the ability to

    a. Use surgical scrub.

    b. Open sterile packs.

    c. Put on sterile gloves.

    d. Perform urinary catheterization.

    e. Apply dressings and binders.

PREPARATION AND CARE OF PREOPERATIVE AND POSTOPERATIVE PATIENT
UNIT III

ANSWERS TO TEST

1. a.	4	g.	1	m.	6	s.	18
b.	5	h.	3	n.	2	t.	23
c.	12	i.	10	o.	16	u.	21
d.	9	j.	14	p.	15	v.	20
e.	11	k.	7	q.	17	w.	22
f.	8	l.	13	r.	19		

2. Descriptions should include the following
   a. Preoperative orders
      1) Preparation of operative site
      2) Medications
      3) Treatments
      4) Diagnostic tests
      5) Food and fluids
   b. Permission for surgery
      1) Signed permit is required for all persons who are to have surgery
      2) Signature must be witnessed by a competent person other than a family member
      3) Permit must be signed by the patient, or if unable or a minor, by a family member or guardian
      4) Patient MUST be signed before any preoperative sedative is given
      5) Refusal to sign permit must be reported to the charge nurse and the physician
   c. Physical examination
      1) Exam may be done in physician's office or in treatment room of hospital
      2) History and physical must be completed in most hospitals as well as a copy of the form on the patient's chart before the patient is taken to surgery

ANSWERS TO TEST

d. Preoperative teaching

  1) Teaches patient what will be expected of him or her in the immediate recovery period and later when patient is returned to room

  2) Teaches the patient what to expect and what type of equipment will be used

  3) Tells family what to expect, approximate time for surgery and where to wait until surgery is over, and how the family may help in giving care to the patient during the recovery period

e. Care of valuables

  1) Any jewelry, large sums of money, and/or other valuables should either be sent home with the family or locked in the hospital vault after an itemized list has been signed by the patient

  2) Recordings should be made in the chart telling what valuables were and how they were handled

f. Personal care

  1) Patient should have identification band secured somewhere on body

  2) Bath or shower may be taken before surgery and before patient is dressed in hospital gown

  3) Mouth care should be completed

  4) Nail polish, makeup, jewelry, undergarments, and any prosthesis should be removed

  5) Patient is asked to urinate before preoperative medication is given; patient must remain in bed and side rails are put up when preoperative medication is given

  6) Vital signs are taken and recorded before patient is taken to surgery

g. Documentation of patient records

  1) Nurses notes should be complete and accurate

  2) Surgery permit must be signed

  3) Recent laboratory and X-ray reports should be secured in patient's chart before surgery proceeds

  4) Preoperative checklist should be signed

ANSWERS TO TEST

h. Preparation of bed and unit

1) Surgical or postoperative bed should be made after patient is taken to surgery

2) Furniture should be moved aside so that patient can be transferred from stretcher back to bed easily

3) Necessary equipment should be in room and ready for use as soon as patient arrives

3. Descriptions should include the following

a. Fear of the unknown

1) Explain each procedure to patient and family in language they will understand

2) Tell patient what the recovery room will be like, what will be expected of her or him, and any other information as needed

3) Explain the importance of following instructions about breathing exercises, medications that patient will receive, and what it will be like in the first recovery stage

b. Fear of death, disfigurement

1) Discuss patient's fears and give all information you can about the type of surgery that will be done

2) Answer any questions you can concerning the type of procedure to be performed and the type of anesthesia to be used

c. Fear of pain

1) Prepare the patient if he or she will experience pain; NEVER tell the patient there will be no discomfort if you know there will be

2) Reassure the patient that pain will be controlled

d. Fear of being alone, helpless, and dependent

1) Stay with patient and allow him or her to express feelings

2) Make sure the patient has some input into his or her care, and allow the patient to make some decisions when possible

3) Allow the patient to have someone with whom he or she is familiar, either a family member or a nurse, accompany him or her to the OR

ANSWERS TO TEST

4. a. R
   b. G
   c. H
   d. R
   e. G
   f. G
   g. H
   h. R
   i. H

5. a. Immediate (recovery room)
   1) To provide for safety (side rails up)
   2) To position patient for adequate oxygen exchange
   3) To check physician's orders for immediate procedures to be carried out
   4) To observe and record frequently and accurately information concerning dressings, color, vital signs, and level of conciousness
   5) To monitor intake and output of fluids in IVs, dressings, and drainage tubings

   b. Recovery in room
   1) To obtain report from recovery-room staff before patient's return
   2) To make sure there is enough help to make the move from the stretcher to the patient's bed easily and carefully
   3) To continue oxygen if needed and to put up side rails of bed
   4) To take all vital signs and to check all drainage tubings, dressings, IV fluids, and color of patient
   5) To compare findings with the recovery-room report as the nurse charts his or her results
   6) To check and carry out any further orders of the physician
   7) To notify family that patient has returned
   8) To monitor the patient according to hospital or physician's orders
   9) To position patient frequently and assist with breathing and coughing exercises
   10) To assist with movement and ambulation as soon as possible
   11) To reinforce dressings as needed or to change if physician indicates
   12) To observe, report, and record any unusual symptoms

ANSWERS TO TEST

6. a. Intravenous therapy setup used for parenteral fluid administration
   b. Suction machines to provide for evacuating organs or drainage of wounds
   c. Gravity-flow closed pumps
   d. Drainage tubings to assist in promoting flow of fluids from organs or wounds

7. a. Hemorrhage
      1) Excessive sanguineous or serosanguineous drainage
      2) Bloody drainage from suction or drainage apparatus
      3) Hematemesis
      4) Shock symptoms
   b. Shock
      1) Drop in blood pressure; rapid, weak pulse; rapid, shallow respirations
      2) Cool, moist skin
      3) Temperature below normal
      4) Pallor or cyanosis, particularly lips and nails
      5) Restlessness and anxiety
      6) Thirst
      7) Nausea and vomiting
      8) Loss of consciousness
   c. Thrombophlebitis
      1) Pain in the calf of the extremity
      2) Swelling of limb
      3) Redness around area
      4) Temperature elevation
   d. Hypostatic pneumonia
      1) Slight temperature elevation
      2) Increased pulse rate and rapid, slow respirations
      3) Cough

ANSWERS TO TEST

e. Wound infection
   1) Temperature elevation
   2) Increased pulse rate
   3) Pain, tenderness, or swelling at wound site
   4) Redness or inflammation of wound site
   5) Foul-smelling, purulent drainage
   6) Elevated white cell count

f. Gastrointestinal disturbance
   1) Abdominal distention
   2) Flatulence
   3) Pain or cramping in abdomen
   4) Nausea or vomiting
   5) Dryness of mouth
   6) Constipation

g. Wound dehiscence and/or evisceration
   1) Unexplained fever
   2) Unexplained tachycardia and occasional hypotension
   3) Unusual wound pain
   4) Distention of abdominal area
   5) Sudden gush of fluid from a previously dry wound
   6) Obvious opening of wound with protrusion of organs

h. Infiltration of intravenous infusion
   1) Area around needle becomes firm, cold, and pale
   2) Patient complains of pain or numbness in affected area
   3) Edema is noticed around needle site and area

ANSWERS TO TEST

8. Descriptions should include the following

   a. Hemorrhage

      1) Report symptoms immediately

      2) Apply pressure on site or pressure point if appropriate

      3) Keep patient quiet

      4) DO NOT panic

      5) Position patient in either recumbent position or with extremities elevated to increase blood supply to head, unless contraindicated

      6) Provide for warmth if patient is chilling

      7) Be prepared to assist with administration of parenteral fluids and/or blood transfusion

      8) Monitor vital signs frequently

   b. Shock

      1) Report symptoms immediately

      2) Elevate foot of bed unless contraindicated

      3) Keep patient only warm enough to prevent heat loss

      4) Restrict fluids and food until patient has been checked by physician

      5) Check vital signs

      6) Administer oxygen if ordered

      7) Be prepared to assist with administration of parenteral fluids

      8) Keep patient quiet

   c. Thrombophlebitis

      1) Avoid any strain on leg and DO NOT MASSAGE

      2) Support leg as prescribed

      3) Monitor vital signs as indicated

   d. Hypostatic pneumonia

      1) Turn frequently and encourage deep breathing and coughing exercises

      2) Assist patient in using respiratory aids

      3) Be alert to respiratory-sound changes

ANSWERS TO TEST

e. Wound infection

1) Maintain aseptic technique and WASH HANDS FREQUENTLY

2) Change dressings as often as needed

3) Encourage food and fluid intake

4) Encourage rest and sleep

5) Administer antibiotic as prescribed

f. Gastrointestinal disturbance

1) Change position frequently and encourage ambulation as soon as possible

2) Provide mouth care frequently

3) Avoid cold and high-glucose beverages which may cause gas

4) Use rectal tube if ordered

5) Give appropriate medication to prevent vomiting if prescribed

6) Auscultate abdomen for bowel sounds

g. Wound dehiscence and/or evisceration

1) DO NOT panic

2) Keep patient quiet and still

3) Remove dressing and inspect wound

4) Apply a heavy dressing and binder if needed to close edges of incision

5) Notify surgeon

h. Infiltration of intravenous infusion

1) Observe site frequently

2) Immobilize site of administration, depending on site used

3) Avoid any unnecessary pulling or obstruction of tubing, container, or needle

4) Monitor flow and site; document observations

ANSWERS TO TEST

9. a. 2
   b. 1
   c. 3
   d. 7
   e. 5
   f. 6
   g. 4
   h. 8

10. b, c, d, e, f, g

11. a, b, d, e, f, g, i, k

12. a. Boiling
    b. Autoclaving
    c. Chemical disinfection
    d. Dry heat

13. a. 10
    b. 11
    c. 7
    d. 1
    e. 4
    f. 9
    g. 8
    h. 2
    i. 12
    j. 5
    k. 6
    l. 3

14. a. Relieve urinary retention
    b. Empty the bladder before surgery, delivery, or an examination
    c. Determine urine residual
    d. Obtain a sterile specimen for culture and sensitivity
    e. Provide long-term urinary maintenance
    f. Irrigate bladder

15. a. Try other measures first; catheterize only when necessary
    b. The bladder is a sterile cavity, and sterile technique must be followed
    c. Infection may be produced when poor techniques are used or when catheterization must be repeated

ANSWERS TO TEST

d. Patient should be properly prepared by explaining the procedure, by providing for privacy, and by reassuring patient when performing the procedure

e. Correct equipment should be used to minimize cost to patient

16. a. Why procedure was performed

    b. What size and type of catheter was used

    c. Time when procedure was performed

    d. When urine appeared and amount and appearance of urine

    e. How patient tolerated procedure and any patient response

17. a, b, e, f, g

18. a. 3
    b. 7
    c. 5
    d. 8
    e. 1
    f. 4
    g. 2
    h. 6

19. Evaluated to the satisfaction of the instructor

20. Performance skills evaluated to the satisfaction of the instructor

CARE OF THE CRITICALLY ILL PATIENT
UNIT IV

UNIT OBJECTIVE

After completing this unit, the student should be able to give care to the critically ill patient and assist in treatment in emergency situations. The student should also be able to assist families of critically ill patients. This knowledge will be shown by completing the assignment sheets, job sheet, and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with care of the critically ill patient to their correct definitions.
2. State guidelines for the nurse who performs care for the critically ill patient.
3. List factors that contribute to stress experienced by the critically ill patient.
4. Select from a list ways in which the nurse can assist the critically ill patient.
5. List emergency equipment that may be needed in treating a critically ill patient.
6. Arrange in order steps to be taken in an emergency.
7. Describe ways in which the nurse may meet specific needs of the family of the critically ill patient.
8. State reasons patients should be admitted to an intensive care environment.
9. Select from a list benefits of an intensive care environment.
10. Check emergency equipment.
11. Meet needs of critically ill patients.
12. Demonstrate the ability to apply electrodes and leads for a cardiac monitor.

CARE OF THE CRITICALLY ILL PATIENT
UNIT IV

SUGGESTED ACTIVITIES

I. Suggested activities

  A. Order materials planned to supplement unit.

  B. Provide students with objective sheet.

  C. Provide students with information, assignment, and job sheets.

  D. Discuss unit and specific objectives.

  E. Discuss information, assignment, and job sheets.

  (NOTE: The patient for assignment sheet may be assigned by instructor, utilizing either the general floor or an ICU.)

  F. Demonstrate and discuss procedures outlined in job sheet.

  G. Develop appropriate learning activities for special needs students.

  H. Arrange for students to visit an intensive care unit to practice job sheet skills.

  I. Give test.

  J. Reteach if necessary.

II. Instructional materials

  A. Objective sheet

  B. Suggested activities

  C. Information sheet

  D. Assignment sheets

    1. Assignment Sheet #1--Check Emergency Equipment

    2. Assignment Sheet #2--Meet Needs of Critically Ill Patients

  E. Answers to assignment sheets

  F. Job Sheet #1--Apply Electrodes and Leads for a Cardiac Monitor

  G. Test

  H. Answers to test

SUGGESTED ACTIVITIES

III. Unit references

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B. O'Conner, Andrea B. *Nursing: Critically Ill Patients*. New York: American Journal of Nursing Company, Educational Services Division, 1978.

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CARE OF THE CRITICALLY ILL PATIENT
UNIT IV

INFORMATION SHEET

I. Terms and definitions

A. Critical--Pertaining to a crisis; turning point of an illness

B. Intensive Care Unit (ICU)--Special area of patient care developed to enable critically ill patients to be cared for in a close, one-to-one relationship with health care providers

(NOTE: In addition to intensive care units, some hospitals have more specific areas of care related to a condition or area of concern. A Coronary Care Unit (CCU) is designed to care for patients with serious conditions of the heart and vascular system; Surgical Intensive Care Units are designed for patients having surgery that will require intensive postoperative monitoring.)

C. Deprivation--State of having something withheld or taken away

D. Hemodynamics--Study or system of monitoring the pressure of the circulating blood throughout the body

(NOTE: There are various methods of internally monitoring the cardiovascular system.)

EXAMPLE: Internal Swan-Ganz catheter is a very sophisticated system of monitoring. Only those persons skilled in the placement and management of this system should perform needed procedures. (See Figure 1.)

FIGURE 1

INFORMATION SHEET

II. Guidelines for the nurse who performs care for the critically ill patient

(NOTE: The nurse that provides care for the critically ill patient must be able to make decisions, act quickly, and be able to perform highly technical skills.)

A. Know your equipment

(NOTE: Keep current on all new equipment; be familiar with it and note any indications that equipment might be faulty. If equipment is found to be faulty, send for replacement or repair.)

B. Document and report all patient care and reaction, giving the exact time and a clear statement of actions

C. Know your limitations--DO NOT perform procedure if you are unsure

D. Be alert in making observations of changes in conditions

(NOTE: A critically ill patient's condition can change within seconds, and reactions can mean life or death.)

III. Factors that contribute to stress experienced by the critically ill patient

A. Sensory overload or deprivation

(NOTE: Noisy monitors, paging systems, respirators, and frequent checking by health team members result in an overload of the senses. Also, a patient in an isolated unit without a window, telephone, radio, or television to keep him or her aware of the outside world can be deprived of stimulation.)

B. Chemical agents

(NOTE: A critically ill patient may be taking many types of drugs to combat certain conditions. Various drugs used together can cause confusion, disorientation, and stress.)

C. Emotional and social changes

(NOTE: Anxiety, fear, and separation from others can cause great mental stress that can lead to physical stress.)

D. Pain

(NOTE: The fear of pain can cause even more pain as the patient becomes tense and anxious.)

E. Dependency on others

F. Loss of control

G. Loss of privacy

H. Physiological stress of condition itself

INFORMATION SHEET

IV. Ways in which the nurse can assist the critically ill patient (Assignment Sheet #2)

A. Allow patient to keep some personal belongings close

B. Place a calendar and clock nearby, and turn down lights at night to help keep patient oriented to the outside world

C. Keep monitors, respirators, and other noisy equipment away from patient's head, if possible

D. Change methods of procedures gradually when necessary

E. Arrange procedures so that patient has longest possible period of uninterrupted sleep

F. Allow family and friends to spend as much time with patient as condition permits

(NOTE: Hospital policy may dictate visiting hours and the amount of time that may be spent with patient.)

G. Encourage family and friends to talk to patient about routine topics of conversation

EXAMPLE: Patient's garden at home

H. Talk to patient as much as possible; touch him or her when you give care

I. Explain each procedure, and respond to patient, even though patient may be semicomatose or comatose

J. Devise some type of communication system if patient is unable to speak, hear, or see

K. Allow patient to plan and assist with care as much as possible

INFORMATION SHEET

V. Emergency equipment that may be needed in treating a critically ill patient (Figures 2-8; Assignment Sheet #1; Job Sheet #1)

(NOTE: The pieces of equipment shown below are examples of the equipment used in emergency situations. Your facility may use a different brand. Become familiar with the equipment you will be using.)

A. Cardiac monitor systems (external)

EXAMPLES:

FIGURE 2 Cardiac Monitor

FIGURE 3 Telemetry

INFORMATION SHEET

B. Oxygen support systems

(NOTE: Equipment becomes more sophisticated as condition indicates.)

EXAMPLES:

FIGURE 4 Ambu Bag

FIGURE 5 Respirator

INFORMATION SHEET

C. Defibrilator

(NOTE: There are many types of defibrilators; know how to operate the one used in your facility.)

EXAMPLE:

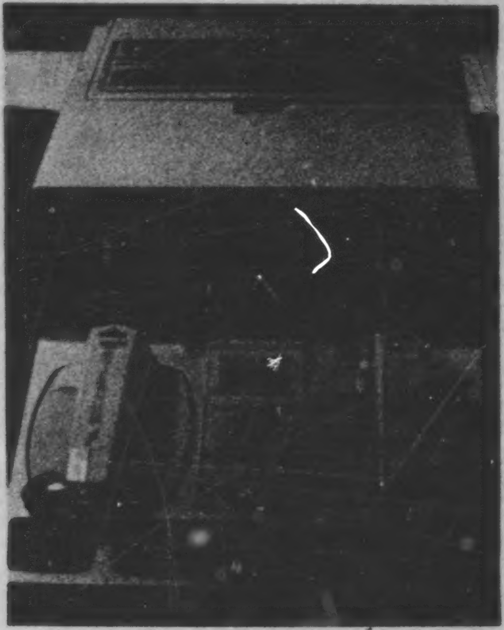

FIGURE 6

D. Laryngeoscope

EXAMPLE:

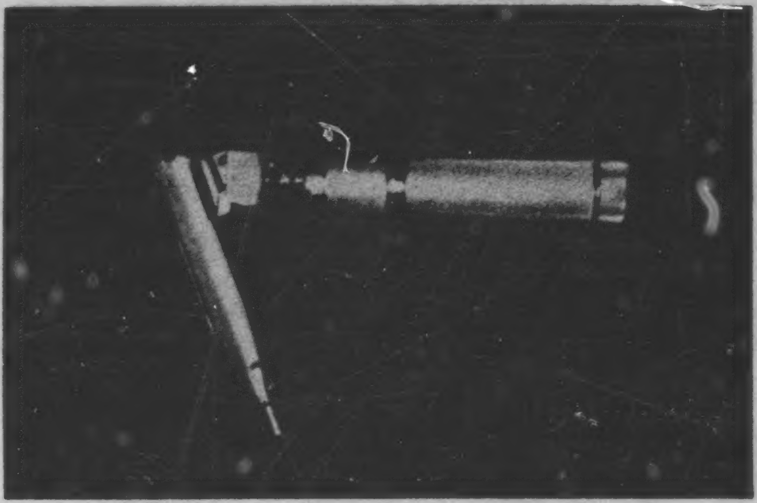

FIGURE 7

INFORMATION SHEET

E. Airway

EXAMPLE:

FIGURE 8

VI. Steps to be taken in an emergency

(NOTE: When an emergency occurs, no matter if it happens in a general unit or in the intensive care environment, there are hospital policies and procedures that should be followed. Know how to handle emergencies in your area.)

A. Assess patient's condition and take initial resuscitation steps

(NOTE: Check patient's condition using the A-B-C-D method. A--Airway opening, B--Breathing restored, C--Circulation restored, and D--Definitive therapy.)

B. Call for assistance

(NOTE: If your hospital does not have an emergency team or a specific code system, call out loudly to anyone who can hear you. Many hospitals equip rooms with an emergency call system, or, in many, the room phone hooks into an alarm system. DO NOT leave the patient, but DO call for help.)

C. If emergency occurs in a semiprivate room, arrange for other patient to be taken to another area, if possible

D. Make room for needed equipment

E. Make observations as the resuscitation process takes place

(NOTE: Be aware of exactly what took place and the time elements. In emergency situations, it is sometimes difficult to remember for documentation purposes exactly what took place and when.)

INFORMATION SHEET

VII. Ways in which the nurse may meet specific needs of the family of the critically ill patient (Assignment Sheet #2)

A. Relieve initial fears and anxiety

1. Introduce yourself to family
2. Give family all information you can about what will take place within the unit

   (NOTE: Prepare family members for specific activities and types of equipment they will see.)

3. Orient family members to the unit and lounge or waiting room area, and tell them the visiting hours
4. Exchange phone numbers, and reassure family that you will keep in close communication

B. Accommodate family's desire to be with patient

1. Arrange flexible hours for visiting if possible
2. Give visitors an opportunity to decide to remain or to leave the room when care is given to the patient
3. Make sure privacy is provided

C. Accommodate family's desire to help with patient's care

(NOTE: Patient's condition should be considered before allowing family members to provide care.)

1. Explain procedures and assist with care until family member is confident
2. Praise efforts frequently

D. Allow for ventilation of feelings

1. Spend time talking with spouse or family members away from the bedside
2. Introduce any other health care workers who will be giving patient care, and encourage questions from family
3. Allow family members to discuss problems, fears, or questions freely, and assist in finding resource persons if needed

   EXAMPLES: Physician, social worker, financial aid person, volunteer, chaplain, other member of clergy, patient representative

INFORMATION SHEET

VIII. Reasons patients should be admitted to an intensive care environment

A. Patient's condition requires close observation

B. Patient's condition requires that specialized equipment be used

C. Patient's condition merits treatment by specially trained health care staff

(NOTE: The number of staff persons assigned to each patient will depend on the seriousness of the condition.)

IX. Benefits of an intensive care environment

A. Patient is in a controlled environment

B. Patient's condition can be constantly monitored by special equipment and specially trained personnel

CARE OF THE CRITICALLY ILL PATIENT
UNIT IV

ASSIGNMENT SHEET #1--CHECK EMERGENCY EQUIPMENT

NAME ______________________________ SCORE ____________

Each facility has a specific system to handle emergencies in each patient care area. Supplies and equipment are kept in a certain place and are checked frequently to make sure that supplies are adequate and equipment is in working order. It is important to know where this equipment is kept and how to use each item.

PART I

List each item of emergency equipment, and describe how it would be used in an emergency situation. Look up in a pharmacology resource given to you by the instructor each drug listed. Write its use and the way it can be administered.

SUPPLIES	USES

EQUIPMENT	USES

ASSIGNMENT SHEET #1

DRUGS	USES AND METHODS OF ADMINISTRATION

PART II

Draw the emergency cart, tray, or case where supplies are kept, and identify where you would find each item.

CARE OF THE CRITICALLY ILL PATIENT
UNIT IV

ASSIGNMENT SHEET #2--MEET NEEDS OF CRITICALLY ILL PATIENTS

NAME ______________________________ SCORE __________

Meeting the needs of the critically ill patient can appear awesome to the nurse who has not had experience in this special area. Learning to assess and meet the needs of these types of patients can become easier if the nurse can learn to gather data, assess facts about the condition of the patient, and plan care according to priorities of concern. Not only does the nurse need to plan care for the patient, but the nurse must also be concerned in meeting the needs of the patient's family.

PART I

Read the following case study. Consider the patient's needs and how you would meet specific needs. This is not a detailed care plan, but a general outline on actions you might take to provide care for the patient and the patient's family.

CASE STUDY

Mr. G. Green has been admitted to your unit immediately following surgery to remove a badly damaged spleen caused from a traumatic automobile accident. Mr. Green's other injuries include multiple abrasions and superficial lacerations over a good deal of his body. Mr. Green is a 46-year-old salesman, 400 miles from home on a sales trip to your city. He was involved in a three-car accident and brought to your hospital's ER. His family has been contacted, and they have begun the trip to the hospital.

Mr. Green has been checked into Room #206, and you begin your initial assessment of his needs, equipment to be used or needed, and potential problems to look for and prevent. To assess the patient's needs, you should begin with a breakdown of each system and answer the following questions.

A. CIRCULATORY SYSTEM

1. What observations would you make that would help you assess Mr. Green's total circulatory system?

   EXAMPLES: Color, VS

   ____

   ____

   ____

   ____

   ____

   ____

ASSIGNMENT SHEET #2

2. Which pieces of equipment would you need, or which pieces of equipment might be used, to monitor the circulatory system?

   EXAMPLES: Cardiac monitor, dressing

3. What signs or symptoms would you need to look for, or be aware of, that might indicate problems?

   EXAMPLES: Changes in blood pressure or pulse; bright red drainage on dressing

ASSIGNMENT SHEET #2

4. What diagnostic tests might be done to evaluate this system?

EXAMPLES: Hematology studies, cardiac monitor strips

5. How would you handle each of the problems identified?

EXAMPLE: Bright red drainage on dressing--Note time, amount, reinforce dressing; notify physician if copious amount

ASSIGNMENT SHEET #2

B. RESPIRATORY SYSTEM

1. What observation would you make that would help you assess Mr. Green's respiratory system?

   EXAMPLES: Color, VS

   ____

   ____

   ____

   ____

   ____

   ____

   ____

   ____

   ____

2. Which pieces of equipment would you need, or which pieces of equipment might be used, to monitor the respiratory system?

   EXAMPLE: Stethoscope

   ____

   ____

   ____

   ____

   ____

   ____

   ____

   ____

   ____

ASSIGNMENT SHEET #2

3. What signs or symptoms would you need to look for, or be aware of, that might indicate problems?

EXAMPLE: Noisy and irregular respirations

4. What diagnostic tests might be done to evaluate this system?

EXAMPLE: Blood gases

ASSIGNMENT SHEET #2

5. How would you handle each of the problems identified?

EXAMPLE: Noisy and irregular respirations--Check for patent airway, reposition, suction if needed, monitor closely

C. NERVOUS SYSTEM

1. What observations would you make that would help you assess Mr. Green's total nervous system?

EXAMPLE: Level of consciousness

ASSIGNMENT SHEET #2

2. Which pieces of equipment would you need, or which pieces of equipment might be used, to monitor the nervous system?

   EXAMPLE: Penlight

3. What signs or symptoms would you need to look for, or be aware of, that might indicate problems?

   EXAMPLES: Restlessness, unequal pupils

4. What diagnostic tests might be done to evaluate this system?

   EXAMPLE: Neurological check

ASSIGNMENT SHEET #2

D. GENITOURINARY SYSTEM

1. What observations would you make that would help you assess Mr. Green's genitourinary system?

EXAMPLE: Color of urine

2. Which pieces of equipment would you need, or which pieces of equipment might be used, to monitor the genitourinary system?

EXAMPLE: Closed urinary drainage collecting system

3. What signs or symptoms would you need to look for, or be aware of, that might indicate problems?

EXAMPLE: Anuria

ASSIGNMENT SHEET #2

4. What diagnostic tests might be done to evaluate this system?

   EXAMPLE: Urinalysis

5. How would you handle each of the problems identified?

   EXAMPLE: Anuria--Check catheter for patency, check abdomen for distention of bladder, irrigate catheter if indicated, notify physician

E. GASTROINTESTINAL SYSTEM

1. What observations would you make that would help you assess Mr. Green's gastrointestinal system?

   EXAMPLE: Size of abdomen

ASSIGNMENT SHEET #2

2. Which pieces of equipment would you need, or which pieces of equipment might be used, to monitor the gastrointestinal system?

   EXAMPLE: Stethoscope to listen for bowel sounds

   ____
   ____
   ____
   ____
   ____

3. What signs or symptoms would you need to look for, or be aware of, that might indicate problems?

   EXAMPLE: Distention of abdomen

   ____
   ____
   ____
   ____
   ____

4. What diagnostic tests might be done to evaluate this system?

   EXAMPLE: X ray of abdomen

   ____
   ____
   ____
   ____
   ____
   ____

ASSIGNMENT SHEET #2

5. How would you handle each of the problems identified?

EXAMPLE: Distention of abdomen--Check patency of nasogastric tube, auscultate abdomen, notify physician

____

____

____

____

F. WOUND ASSESSMENT

1. What observations would you make of the wound or surgical site?

EXAMPLE: Color

____

____

____

____

2. What signs or symptoms would you need to look for, or be aware of, that might indicate problems?

EXAMPLE: Purulent drainage

____

____

____

____

3. How would you handle each of the problems identified?

EXAMPLE: Purulent drainage--Take culture of the drainage, monitor vital signs closely, document carefully, notify physician

____

____

____

____

ASSIGNMENT SHEET #2

G. Using the form below, briefly outline the basic care you would give Mr. Green.

PATIENT'S SPECIAL NEEDS	NURSING INTERVENTION

H. Mr. Green's physical condition is beginning to stabilize, but he is confused at times and asks who he is and where he is. At times he complains about noises and becomes very restless, throwing off the bed linens.

What actions can you initiate that might help to orient Mr. Green?

ASSIGNMENT SHEET #2

I. Mr. Green's wife, his 11-year-old son, his mother, and his sister arrived at the hospital about 10:00 a.m., and all want to see Mr. Green.

How can you assist this family? What actions would you take to ensure that the family of Mr. Green is able to adjust to the situation?

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ASSIGNMENT SHEET #2

PART II

You will select or be assigned a critically ill patient on the general floor or in the ICU. Assess the needs of this patient in the intensive care environment. Plan care following the same outline format as in Part I. Fill in the information applicable to your patient. If not applicable, write N/A. This information should be gathered and planned before you give care to the patient. Much of the information can be taken from the patient's chart, but use your observation skills to assess the situation.

Patient's name or initials: ______________________ Age: __________

Date of admission: ______________________________

Reason for admission: ______________________________

____

Primary diagnosis: ______________________________

Admissions Vital Signs T_____ P_____ R_____ B/P_____

A. CIRCULATORY SYSTEM

1. What observations did you make to help assess the patient's circulatory system?

____

____

____

2. Which pieces of equipment did you use, or which piece of equipment is being used, to monitor the circulatory system?

____

____

____

____

3. Did patient show any signs or symptoms that indicated problems? If so, please list.

____

____

____

____

ASSIGNMENT SHEET #2

4. What diagnostic tests were used to evaluate the circulatory system?

5. How did you handle each of the problems identified?

B. RESPIRATORY SYSTEM

1. What observations did you make to help assess patient's respiratory system?

2. Which pieces of equipment did you use, or which piece of equipment is being used, to monitor the respiratory system?

3. Did patient show any signs or symptoms that indicated problems? If so, please list.

4. How did you handle each of the problems identified?

ASSIGNMENT SHEET #2

5. What diagnostic tests were done to evaluate the respiratory system?

____

____

____

C. NERVOUS SYSTEM

1. What observations did you make to help assess patient's nervous system?

____

____

____

2. Which pieces of equipment did you use, or which piece of equipment is being used, to monitor the nervous system?

____

____

____

3. Did patient show any signs or symptoms that indicated problems? If so, please list.

____

____

____

4. How did you handle each of the problems identified?

____

____

____

5. What diagnostic tests were done to evaluate the nervous system?

____

____

____

ASSIGNMENT SHEET #2

D. GENITOURINARY SYSTEM

1. What observations did you make to help assess the patient's genitourinary system?

2. Which pieces of equipment did you use, or which piece of equipment is being used to monitor the genitourinary system?

3. Did patient show any signs or symptoms that indicated problems? If so, please list.

4. How did you handle each of the problems identified?

5. What diagnostic tests were done to evaluate the genitourinary system?

E. GASTROINTESTINAL SYSTEM

1. What observations did you make to help assess patient's gastrointestinal system?

ASSIGNMENT SHEET #2

2. Which pieces of equipment did you use, or which piece of equipment is being used, to monitor the gastrointestinal system?

3. Did patient show any signs or symptoms that indicated problems? If so, please list.

4. How did you handle each of the problems identified?

5. What diagnostic tests were done to evaluate the gastrointestinal system?

F. WOUND ASSESSMENT

1. What observations did you make of the wound or surgical site?

2. What signs or symptoms did you find that indicated problems?

ASSIGNMENT SHEET #2

3. How did you handle each of the problems identified?

G. Using the form below, briefly outline the basic care you will give your patient.

PATIENT'S SPECIAL NEEDS	NURSING INTERVENTION

ASSIGNMENT SHEET #2

H. Which family members were present?

I. What actions did you initiate or carry through to assist family members in adjusting to the intensive care environment?

CARE OF THE CRITICALLY ILL PATIENT
UNIT IV

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

Assignment Sheet #2--Evaluated to the satisfaction of the instructor

CARE OF THE CRITICALLY ILL PATIENT
UNIT IV

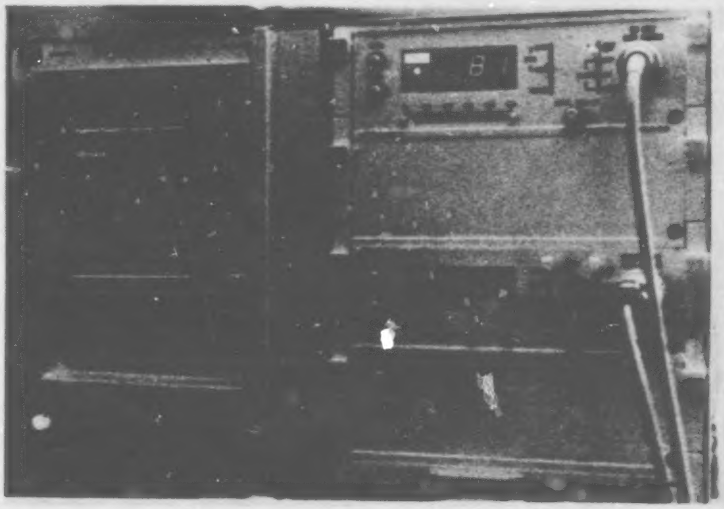
JOB SHEET #1--APPLY ELECTRODES AND LEADS FOR A CARDIAC MONITOR

I. Equipment

A. Cardiac monitor system (Figure 9)

(NOTE: There are many types of cardiac monitoring systems. This job sheet covers the system using three leads over three body areas. If you are using a different system, the procedure book in your hospital will provide step-by-step directions.)

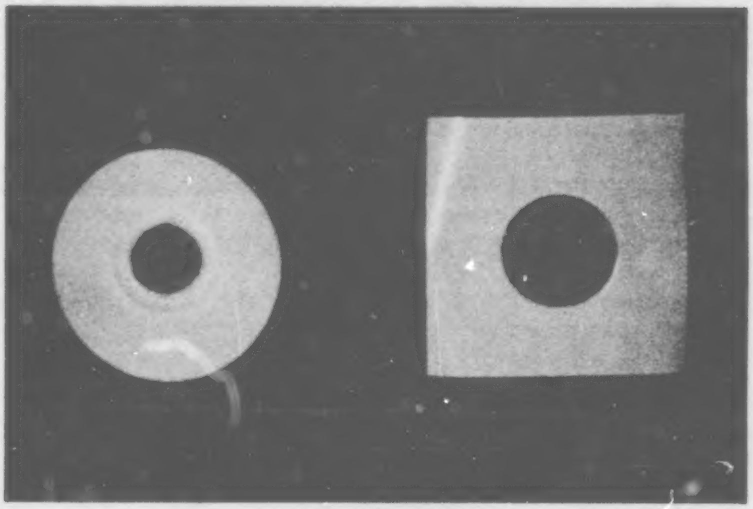
FIGURE 9



JOB SHEET #1

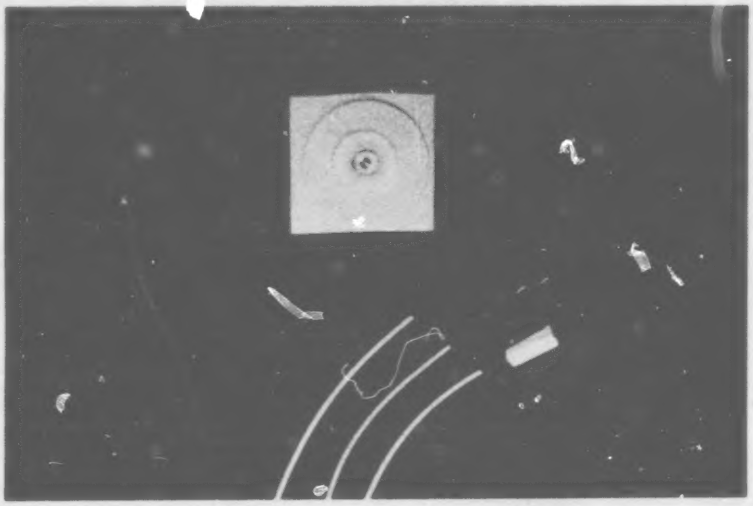
B. Electrode jelly or pre-moistened pads (Figure 10)

FIGURE 10



C. Electrodes and leads (Figure 11)

FIGURE 11



D. Prep kit

(NOTE: In some cases, patients may need to be shaved to make sure electrodes make good connections.)

JOB SHEET #1

II. Procedure

A. Identify patient and explain procedure

(NOTE: Many patients who have never had an EKG run, or had any cardiac monitoring, may be apprehensive that you are going to shock them. Be sure to show them the equipment and explain each step of the procedure. Show them the monitor system and how it will help you to keep close observation.)

B. Wash hands

C. Gather all equipment at bedside

D. Prep chest area if needed

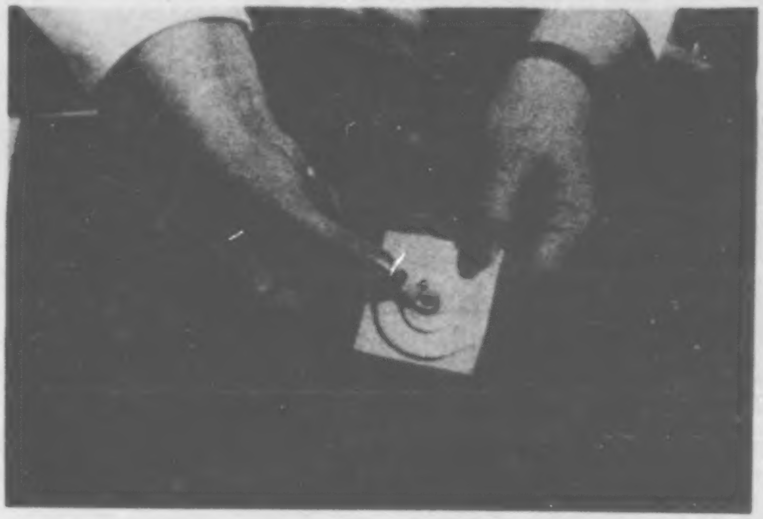
E. Select electrodes to be used (Figure 12)

FIGURE 12

JOB SHEET #1

F. Apply electrode jelly or premoistened pad to electrode (Figure 13)

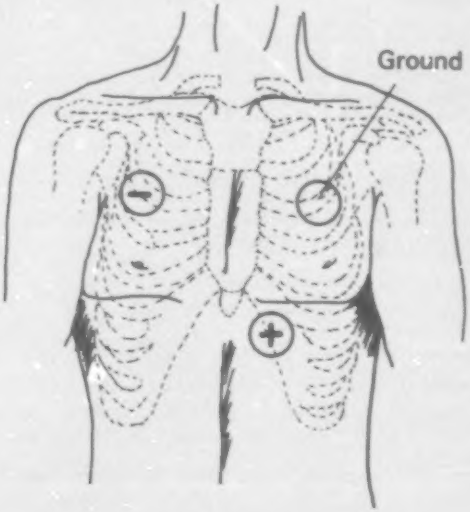
FIGURE 13



G. Apply electrode to skin and secure (Figure 14)

(NOTE: Electrodes and leads are specifically placed to monitor the special electrical activity in that part of the heart. The type of lead used will depend on monitor and physician's directions. The example below [Figure 14] shows electrode placement to be used for Lead II.)

FIGURE 14

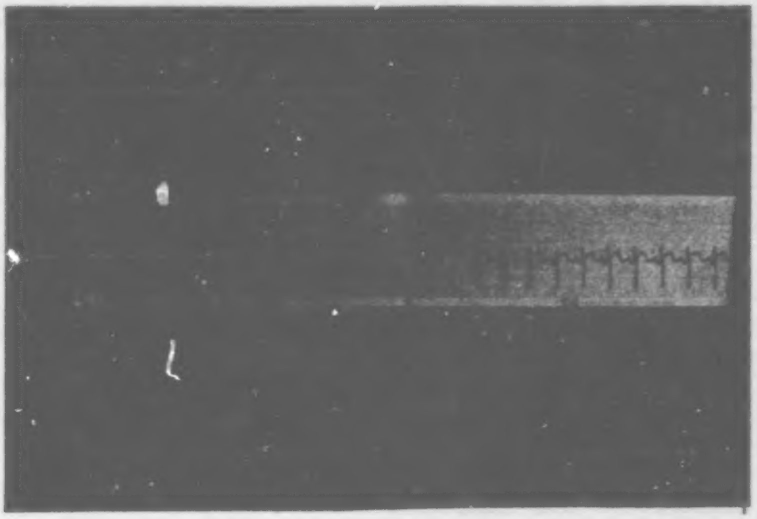


JOB SHEET #1

H. Attach leads; begin monitor system

I. Run several strips for each lead to be sure good contact has been made (Figure 15)

FIGURE 15



J. Make patient comfortable

K. Document procedure

JOB SHEET #1

III. Checklist for applying electrodes and leads for a cardiac monitor

		Performed Well	Needs Improvement
A.	Identified patient and explained procedure	☐	☐
B.	Washed hands correctly	☐	☐
C.	Gathered all equipment	☐	☐
D.	Prepped chest area if needed	☐	☐
E.	Selected electrodes to be used	☐	☐
F.	Applied electrode jelly or pre-moisturized pad to electrode	☐	☐
G.	Applied electrode to skin and secured	☐	☐
H.	Attached leads; began monitoring system	☐	☐
I.	Ran several strips for each lead to be sure good contact had been made	☐	☐
J.	Made patient comfortable	☐	☐
K.	Documented procedure	☐	☐

Comments: ____

____

____

____

____

____

CARE OF THE CRITICALLY ILL PATIENT
UNIT IV

TEST

NAME ____ SCORE ____________

1. Match terms associated with care of the critically ill patient to their correct definitions. Write the correct numbers in the blanks.

_____a. State of having something withheld or taken away

_____b. Pertaining to a crisis; turning point of an illness

_____c. Special area of patient care developed to enable critically ill patients to be cared for in a close, one-to-one relationship with health care providers

_____d. Study or system of monitoring the pressure of the circulating blood throughout the body

1. Hemodynamics
2. Deprivation
3. Intensive Care Unit (ICU)
4. Critical

2. State guidelines for the nurse who performs care for the critically ill patient.

a. ____

b. ____

c. ____

d. ____

3. List factors that contribute to stress experienced by the critically ill patient.

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

g. ____

h. ____

TEST

4. Select from the following list ways in which the nurse can assist the critically ill patient. Write an "X" in the blank before each correct answer.

_____a. Allow patient to keep some personal belongings close

_____b. Change methods of procedures gradually when necessary

_____c. Keep lights low at all times

_____d. Arrange procedures so that patient has longest possible period of uninterrupted sleep

_____e. Encourage family and friends to talk to patient about routine topics of conversation

_____f. Place a calendar and clock nearby, and turn down lights at night to help keep patient oriented to the outside world

_____g. Devise some type of communication system if patient is unable to speak, hear, or see

_____h. Do not explain procedures to patient, as this might make him or her more anxious

_____i. Allow patient to plan and assist with care as much as possible

_____j. Keep monitors, respirators, and other noisy equipment away from patient's head, if possible

_____k. Ask visitors not to talk to patient as this might confuse him or her

_____l. Explain each procedure, and respond to patient, even though patient may be semi-comatose or comatose

_____m. Allow family and friends to spend as much time with patient as condition permits

_____n. Talk to patient as much as possible; touch him or her when you give care

5. List emergency equipment that may be needed in treating a critically ill patient.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

TEST

6. Arrange in order steps to be taken in an emergency. Write a "1" before the first action, a "2" before the second action, and so on.

______a. Make observations as the resuscitation process takes place

______b. Call for assistance

______c. Assess patient's condition and take initial resuscitation steps

______d. If emergency occurs in a semiprivate room, arrange for other patient to be taken to another area, if possible

______e. Make room for needed equipment

7. Describe ways in which the nurse may meet specific needs of the family of the critically ill patient.

a. Relieve initial fears and anxiety--____________________

b. Accommodate family's desire to be with patient--____________________

c. Accommodate family's desire to help with patient's care--____________________

d. Allow for ventilation of feelings--____________________

TEST

8. State reasons patients should be admitted to an intensive care environment.

a. ____

____

b. ____

____

c. ____

____

9. Select from the following list benefits of an intensive care environment. Write an "X" in the blank before each correct answer.

______a. Hospital costs are less

______b. Patient is in a controlled environment

______c. Patient requires less nursing care because of smallness of the area

______d. Patient's condition can be constantly monitored by special equipment and specially trained personnel

(NOTE: Test questions 10-12 list the assignment and job sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

10. Check emergency equipment.

11. Meet needs of critically ill patients.

12. Demonstrate the ability to apply electrodes and leads for cardiac monitor.

CARE OF THE CRITICALLY ILL PATIENT
UNIT IV

ANSWERS TO TEST

1. a. 2
   b. 4
   c. 3
   d. 1

2. a. Know your equipment
   b. Document and report all patient care and reaction, giving the exact time and a clear statement of actions
   c. Know your limitations--DO NOT perform procedure if you are unsure
   d. Be alert in making observations of changes in conditions

3. a. Sensory overload/deprivation
   b. Chemical agents
   c. Emotional and social changes
   d. Pain
   e. Dependency on others
   f. Loss of control
   g. Loss of privacy
   h. Physiological stress of condition itself

4. a, b, d, e, f, g, i, j, l, m, n

5. a. Cardiac monitor systems (external)
   b. Oxygen support systems
   c. Defibrilator
   d. Laryngeoscope
   e. Airway

ANSWERS TO TEST

6. a. 5
   b. 2
   c. 1
   d. 3
   e. 4

7. Descriptions should include the following
   a. Relieve initial fears and anxiety
      1) Introduce yourself to family
      2) Give family all information you can about what will take place within the unit
      3) Orient family members to the unit and lounge or waiting room area, and tell them the visiting hours
      4) Exchange phone numbers, and reassure family that you will keep in close communication
   b. Accomodate family's desire to be with patient
      1) Arrange flexible hours for visiting if possible
      2) Give visitors an opportunity to decide to remain or to leave the room when care is given to the patient
      3) Make sure privacy is provided
   c. Accomodate family's desire to help with patient's care
      1) Explain procedures and assist with care until family member is confident
      2) Praise efforts frequently
   d. Allow for ventilation of feelings
      1) Spend time talking with spouse or family members away from the bedside
      2) Introduce other health care workers who will be giving patient care, and encourage questions from family
      3) Allow family members to discuss problems, fears, or questions freely, and assist in finding resource persons if needed

8. a. Patient's condition requires close observation
   b. Patient's condition requires that specialized equipment be used
   c. Patient's condition merits treatment by specially trained health care staff

ANSWERS TO TEST

9. b, d

10. Evaluated to the satisfaction of the instructor

11. Evaluated to the satisfaction of the instructor

12. Performance skills evaluated to the satisfaction of the instructor

SUPPORTIVE CARE OF THE TERMINALLY ILL PATIENT
UNIT V

UNIT OBJECTIVE

After completing this unit, the student should be able to give physical and psychological care to the terminally ill patient. The student should also be able to plan care to meet the needs of the patient's family. This knowledge will be shown by completing the assignment sheet and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with care of the terminally ill patient to their correct definitions.
2. Arrange in order stages of the grieving process.
3. List reasons why some nurses may feel uncomfortable in caring for a dying patient.
4. Describe nursing responsibilities in caring for the dying patient.
5. Select from a list advantages of a hospice for dying patients.
6. State ways in which the nurse may assist patients to die with dignity.
7. Describe common reactions of parents and family when dying patient is a child or infant.
8. State ways in which the nurse can assist parents and families when a child or infant is dying.
9. Match children's perceptions of death to their correct age groups.
10. List common signs of approaching death.
11. Describe nursing responsibilities in caring for the patient at the time of, and after death.
12. State ways in which the nurse may help the patient's family at the time of death and after death.
13. Select from a list information that should be noted in patient's chart at the time of death.
14. Meet the needs of dying patients and their families.

SUPPORTIVE CARE OF THE TERMINALLY ILL PATIENT
UNIT V

SUGGESTED ACTIVITIES

I. Suggested activities

   A. Order materials planned to supplement unit.

      1. Filmstrips

         a. *Care of the Patient with Terminal Cancer.*

         b. *Care of the Dying Patient.*

         (NOTE: Filmstrips a and b are available from Trainex Corporation, Box 116, Garden Grove, California 92642.)

         c. *Loss and Grief.*

         d. *Perspectives on Dying.*

         (NOTE: Filmstrips c and d are available from Concept Media, Box 19542, Irvine, California 92714.)

      2. Film--*Hospice*. Color, 16mm, 26 minutes. Available from Billy Budd Films, Inc., 235 East 57th Street, New York, New York 10022.

      (NOTE: For more information, contact Ewart V. Thomas, chairman, National Hospital Organization Committee for Public Relations and Information, 201 Tabor Road, Morris Plains, New Jersey 07950.)

   B. Provide students with objective sheet.

   C. Provide students with information and assignment sheets.

   D. Discuss unit and specific objectives.

   E. Discuss information and assignment sheet.

   F. Develop appropriate learning activities for special needs students.

   G. Invite a clergy member or hospital chaplain to speak to class on how better to assist families and patients who are going through the grieving process.

   H. Ask a pathologist to discuss the post-mortem or autopsy procedures with students.

   (NOTE: If possible, obtain permission for students to view an autopsy.)

   I. Visit a mortuary and have the mortician discuss procedures used to prepare a body for burial.

SUGGESTED ACTIVITIES

- J. Discuss with students their feelings of and experiences with death.
- K. Discuss Assignment Sheet #1 and role play some of the situations.
- L. Give test.
- M. Reteach if necessary.

II. Instructional materials

- A. Objective sheet
- B. Suggested activities
- C. Information sheet
- D. Assignment Sheet #1--Meet the Needs of Dying Patients and Their Families
- E. Answers to assignment sheet
- F. Test
- G. Answers to test

III. Unit references

- A. Browning, Mary H., and Edith P. Lewis, ed. *The Dying Patient: A Nursing Perspective*. New York: The American Journal of Nursing Company, 1972.
- B. Robinson, Lisa. *Psychological Aspects of the Care of Hospitalized Patients*. Philadelphia: F.A. Davis Company, 1976.

SUPPORTIVE CARE OF THE TERMINALLY ILL PATIENT
UNIT V

INFORMATION SHEET

I. Terms and definitions

A. Terminal--Pertaining to the end

B. Expire--To breath one's last breath; to die

C. Mottled--Condition marked by discolored areas

D. Post-mortem--After death

E. Morgue--Area where bodies may be kept until released to mortuary

F. Autopsy--Examination of the body after death; post-mortem examination

G. Hospice--Specialized health care program emphasizing the management of pain and other symptoms associated with terminal illness while caring for the family as well as the patient

(NOTE: Hospice initially meant a lodging for travelers along the way, a place to rest and get care. Hospices were first established in Europe in medieval times by religious orders to care for sick and weary travelers.)

H. Denial stage--Usually is first stage of the grieving process, when patient does not believe or refuses to believe that the situation is happening to him or her

I. Anger stage--Second stage of the grieving process, when patient asks him- or herself why the situation is happening to him or her and at this time in his or her life

J. Bargaining stage--Third stage of the grieving process, when patient makes "deals" with God, or with him- or herself

K. Depression stage--Fourth stage of the grieving process, when the patient realizes that he or she is going to die and there is absolutely nothing that can stop it

L. Acceptance stage--Fifth stage of the grieving process, when patient is able finally to resolve his or her emotional conflicts about the approaching death, and accepts fate

II. Stages of the grieving process

(NOTE: Not all patients go through each stage, or not all go through in this order, and some go through stages more than once. Others may never reach the acceptance stage.)

A. Denial

EXAMPLE: "This can't be."

INFORMATION SHEET

B. Anger

EXAMPLES: "Why me?"
"Someone is against me"

C. Bargaining

EXAMPLES: "If I can just have this surgery, I'll be all right."

D. Depression

E. Acceptance

III. Reasons why some nurses may feel uncomfortable in caring for a dying patient

(NOTE: Every person approaches death and dying differently, based on many experiences in each one's life. The nurse must face his or her own feelings concerning death before being able to deal with dying patients and their families.)

A. Nurse may fear becoming too involved

B. Nurse is forced to face own mortality

C. Nurse may feel guilty that nursing care was not adequate when patient dies

D. Nurse may become frustrated that goals that were set are not being met

E. Nurse may have difficulty in communicating honestly about feelings

IV. Nursing responsibilities in caring for the dying patient (Assignment Sheet #1)

A. Physical care

1. To keep patient clean, dry, and free from odors

(NOTE: Many patients will perspire profusely; chemical imbalances may cause unusual body odors.)

2. To give foods and fluids as tolerated or as desired by patient

3. To position patient for comfort and ease of breathing

(NOTE: Side-lying position may be advantageous if the patient's ability to swallow is impaired. Elevate the head of the bed as needed to ease breathing.)

4. To provide cover as needed for warmth, as patient desires

5. To provide mouth care frequently

(NOTE: Patient may be breathing through the mouth and/or receiving oxygen and mouth will be dry.)

INFORMATION SHEET

6. To change position frequently

7. To assist with elimination needs

B. Emotional care

1. To be available; to arrange for time to spend with patient

   (NOTE: Unfortunately, health personnel have a tendency to withdraw from the dying patient and his or her family. If you do feel uncomfortable, let your supervisor know or ask someone to take your place.)

2. To take time to listen to the patient and leave an open line for communication

3. To say nothing within the patient's hearing that you would not want him or her to hear; avoid whispering

   (NOTE: It is probable that a patient can hear, although he or she may not be able to speak or move.)

4. To focus on the present and help make the most of each day

5. To allow patient to set the pace of your relationship

   (NOTE: Throughout the grieving process the patient will react and will have different needs; being available and understanding the patient's reactions will help meet those needs.)

C. Spiritual care

1. To notify the chaplain or the person designated by the patient

2. To provide privacy and time for the patient and member of clergy

3. To respect and provide for the patient's religious beliefs and practices, even though they may differ from yours

D. Environmental care

1. To provide adequate lighting; to avoid bright lights

2. To provide adequate circulation of air; to use room deodorants as needed

3. To keep room or unit neat and tidy

4. To move patient to private room if possible

V. Advantages of a hospice for dying patients

A. Hospice has at-home atmosphere

B. Family can visit and stay with patient at all times

INFORMATION SHEET

C. Family members can learn to give care under the supervision of health professionals

D. Hospice is usually less expensive than most hospitals

E. Hospice staff tries to keep patient from all pain, both physically and emotionally

F. Patient has more control of care than in a conventional hospital

G. Patient may have choice to die in home with support of hospice staff

VI. Ways in which the nurse may assist patients to die with dignity

A. Take time to sit down by the patient instead of just standing by bedside

B. Provide privacy at all times

C. Allow patient to express fears, anger, and frustrations

D. Provide opportunity for patient to choose or to be in more control of what happens to his or her body in nursing care

E. Assist patient to look after his or her appearance and compliment patient's efforts

F. Avoid judging the patient's beliefs and actions

VII. Common reactions of parents and family when dying patient is a child or infant

(NOTE: These reactions may be seen in any grieving person in a variety of situations.)

A. Guilt feelings that family did not take care of the child properly or that they did something wrong during pregnancy

B. Frustration that they cannot do anything to stop the condition

C. Anger at spouse, other children, or even health care providers

D. Jealousy of a sibling for the attention patient is receiving

VIII. Ways in which the nurse can assist parents and families when a child or infant is dying

A. Assess the needs of the family by gathering background information

(NOTE: It would be helpful to find out the financial ability of the family at this time to cover a catastrophic illness, and any existence of marital stress or family problems before this illness so that those problems could be dealt with at the same time. Also, it would help to know what type of community agencies could assist the family at the time of this illness.)

INFORMATION SHEET

B. Allow parents and families to be with child or infant as much as possible

C. Reassure family members that they are in no way responsible for this illness

D. Offer your support in any way to parents and family

E. Answer all questions honestly; leave an open line of communication

F. Avoid building any false hopes; but do not destroy any hope that is there

G. Be there when the death occurs if possible

IX. Children's perceptions of death according to age groups

A. Birth to two years--Has no real conception of death; begins to experiment with separation

(NOTE: Child will react to separation with anxiety or crying for prolonged periods of time.)

B. Three to five years--Denies death as a natural and final process; believes person is just "sleeping"

(NOTE: Child may appear as though nothing has happened; may ask when sleeping person will wake up.)

C. Six to seven years--Sees death as a bogeyman, skeleton, or ghost; is more aware that death is a finality but associates it with the elderly

(NOTE: May play out death and funeral scenes; also reacts with hostility, may feel deserted, and fears that other loved ones will die.)

D. Eight to ten years--Is more interested in death and what causes death, also what happens after death

(NOTE: Child still has feelings as the six- to seven-year-old group, but now also has a fear of his or her own death.)

X. Common signs of approaching death

A. General slowing of the circulation with the feet; and then the hands, ears, and nose becoming cold to the touch

B. Excessive perspiration over the body

C. Mottled skin

D. Irregular respirations

E. Gradual relaxation of muscle tone with apparent sagging of tissues

INFORMATION SHEET

F. Gradual weakening and disappearance of reflexes

G. Restlessness

H. Gradual or sudden loss of ability to respond vocally

I. Failure of pupils to react to light

J. Gradual decrease of ability to swallow, with subsequent collection of secretions in mouth and upper respiratory tract, which may cause noisy breathing (death rales)

K. Gradual or sudden loss of consciousness or response to stimuli

L. Cessation of breathing

M. Cessation of cardiac function with loss of pulse and heart sounds

XI. Nursing responsibilities in caring for the patient at the time of, and after death

A. At the time of death

1. To note time respirations and pulse ceased
2. To check heartbeat with stethoscope
3. To notify charge nurse and/or physician or representative
4. Do not remove the patient's body from the unit until death has been certified by physician or representative

B. After death

1. To cleanse the patient's body as needed
2. To remove any tubes and catheters
3. To provide clean dressings
4. To place patient's body in supine position with bed flat
5. To close the eyes gently
6. To elevate head on one pillow and place arms at sides
7. To replace dentures or place them in labelled container for mortuary
8. To leave wedding ring on patient; secure with strip of bandage, and note on chart

INFORMATION SHEET

9. To remove other jewelry, list, place in a package with other valuables, and note in chart

   (NOTE: Follow hospital policies on handling patient's belongings.)

10. To place protective pads under patient's body to absorb any urine or fecal discharge

11. To leave identification on patient's body

12. To place a clean gown on patient's body

13. To obtain signatures on release form if a post-mortem or autopsy is to be performed

XII. Ways in which the nurse may help the patient's family at the time of death and after death

A. Allow family to be with patient if possible until death occurs

B. Provide privacy throughout process

C. Be an emotional support

   (NOTE: It is all right to cry with the family. You may still retain a degree of professionalism and be human at the same time.)

D. Provide a private area for the family to be together after the death and while the patient's body is being prepared

E. Ask family members if they wish to be alone with the deceased or if they want you to remain

F. Help family make any arrangements needed

XIII. Information that should be noted in patient's chart at the time of death

A. Time at which pulse and respirations ceased and name of person who certified the death

B. Disposition of all of patient's belongings

C. Record of transfer of patient's body to specific mortuary or morgue

SUPPORTIVE CARE OF THE TERMINALLY ILL PATIENT
UNIT V

ASSIGNMENT SHEET #1--MEET THE NEEDS OF DYING PATIENTS AND THEIR FAMILIES

NAME________________________________ SCORE______________

Sooner or later we must all face death. Eventually we will experience the death of a loved one, a patient we care for, and our own demise. The way we react to death is based upon our background as children, how our parents prepared us for death, our experiences with pets and relatives who have died, and our religious beliefs.

When we react to the dying and death of our patients and their families' reactions to this event, we must be prepared to act according to the needs as we see them. In this assignment sheet you will be given three case studies to react to. Under each study, write a summary of some of the ways that you would meet the needs of these particular patients and their families. Relate these in class and discuss the answers.

Case Study #1

Steven Ryan is 13 and is dying from an in-operable abdominal tumor mass. He has received chemotherapy, and surgery was performed to remove part of the tumor. On three occasions he has hemorrhaged profusely but through intervention and transfusions has been stabilized. Steven's parents are by his bedside constantly. Steven is their only child and one that was born in their later years. They have forbidden anyone to tell Steven that he is dying and they want to help give his care at all times. Many times they are too slow in giving his bath and in their reports the nurses complain that they can't give Steven care because his parents are always there, telling them how they want it done. One day when Steven's parents have gone to the cafeteria for coffee, Steven asks you point blank, "Am I dying?"

A. Your response:____

____

B. How would you meet Steven's needs?____________________________

____

____

____

____

____

____

ASSIGNMENT SHEET #1

C. How would you meet the needs of Steven's parents? ______________________________

____

____

____

____

____

____

Case Study #2

Casey Nickles is a five-year-old patient admitted in the last stages of terminal leukemia. Casey's mother has come with her to the hospital and for several days did not leave her bedside. But the last few days Mrs. Nickles has only called during the three shifts to check on Casey's condition. Mr. and Mrs. Nickles have recently divorced, and Mr. Nickles has taken their son Mike to live with him. On the day that you are to care for Casey, Mr. Nickles visits and Casey tells him Mommy has not been there to see her. Mr. Nickles becomes quite angry and calls Mrs. Nickles from Casey's bedside. Hearing her father's angry words, Casey begins to cry and becomes quite upset.

A. How would you handle the situation? ______________________________

____

____

____

____

B. How would you meet Mr. Nickles' needs? ______________________________

____

____

____

____

____

____

ASSIGNMENT SHEET #1

C. How would you meet Mrs. Nickles' needs?

Case Study #3

Jack Franklin, 38, has been admitted to the hospital for diagnostic tests. He is married and proudly shows you a picture of his three little girls. He is a welder; employed by a large corporation in the city, and is active in the community, especially in the youth activities. His tests have returned; and you are with the physician when Mr. Franklin is given the news, osteosarcoma. The physician outlines the palliative treatment and reassures Mr. Franklin that all will be done that is possible. The physician leaves the room, and Mr. Franklin turns to you and says, "That means I am going to be sick for awhile doesn't it? I don't think I will tell my wife; she will just worry, and maybe I won't have to be here too long. Do you think I can get back to work next week?"

A. How would you meet Mr. Franklin's needs?

B. What do you see as future problems in Mr. and Mrs. Franklin's life?

SUPPORTIVE CARE OF THE TERMINALLY ILL PATIENT
UNIT V

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

SUPPORTIVE CARE OF THE TERMINALLY ILL PATIENT
UNIT V

TEST

NAME______________________________ SCORE______________

1. Match terms associated with care of the terminally ill patient to their correct definitions. Write the correct numbers in the blanks.

_____a. After death

_____b. Examination of the body after death; post-mortem examination

_____c. Pertaining to the end

_____d. Condition marked by discolored areas

_____e. Fifth stage of the grieving process, when patient is able finally to resolve his or her emotional conflicts about the approaching death, and accepts fate

_____f. To breathe one's last breath; to die

_____g. Third stage of the grieving process, when patient makes "deals" with God, or with him- or herself

_____h. Specialized health care program emphasizing the management of pain and other symptoms associated with terminal illness while caring for the family as well as the patient

_____i. Usually is first stage of the grieving process, when patient does not believe or refuses to believe that the situation is happening to him or her

_____j. Areas where bodies may be kept until released to mortuary

_____k. Second stage of the grieving process, when patient asks him- or herself why the situation is happening to him or her and at this time in his or her life

_____l. Fourth stage of the grieving process, when the patient realizes that he or she is going to die and there is absolutely nothing that can stop it

1. Anger stage
2. Autopsy
3. Mottled
4. Denial stage
5. Terminal
6. Post-mortem
7. Bargaining stage
8. Morgue
9. Depression stage
10. Acceptance stage
11. Hospice
12. Expire

TEST

2. Arrange in order stages of the grieving process. Write a "1" before the first step, a "2" before the second step, and so on, in the blanks.

______a. Bargaining

______b. Denial

______c. Acceptance

______d. Anger

______e. Depression

3. List reasons why some nurses may feel uncomfortable in caring for a dying patient.

a. ____

b. ____

c. ____

d. ____

e. ____

4. Describe nursing responsibilities in caring for the dying patient.

a. Physical care--____

____

____

____

____

____

____

____

b. Emotional care--____

____

____

____

____

____

TEST

c. Spiritual care--______________________________

____

____

____

____

____

d. Environmental care--______________________________

____

____

____

____

5. Select from the following list advantages of a hospice for dying patients. Write an "X" in the blank before each correct answer.

_____a. Hospice has at-home atmosphere

_____b. Hospice is usually less expensive than most hospitals

_____c. Hospice staff tries to keep patient from all pain, both physically and emotionally

_____d. Insurance policies will cover all of costs

_____e. Patient has more control of care than in a conventional hospital

_____f. Family members can learn to give care under the supervision of health professionals

_____g. Patient may have choice to die in home with support of hospice staff

_____h. Family can visit and stay with patient at all times

6. State ways in which the nurse may assist patients to die with dignity.

a. ______________________________

b. ______________________________

c. ______________________________

TEST

d. ____________________

e. ____________________

f. ____________________

7. Describe common reactions of parents and family when dying patient is a child or infant.

____

____

____

____

8. State ways in which the nurse can assist parents and families when a child or infant is dying.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

f. ____________________

9. Match children's perceptions of death to their correct age groups. Write the correct numbers in the blanks.

_____a. Is more interested in death and what causes death, also what happens after death

_____b. Has no real conception of death; begins to experiment with separation

_____c. Sees death as a bogeyman, skeleton, or ghost; is more aware that death is a finality but associates it with the elderly

_____d. Denies death as a natural and final process; believes person is just "sleeping"

1. Six to seven years
2. Birth to two years
3. Three to five years
4. Eight to ten years

10. List common signs of approaching death.

a. ____________________

b. ____________________

TEST

c. __________

d. __________

e. __________

f. __________

g. __________

h. __________

i. __________

j. __________

k. __________

l. __________

m. __________

11. Describe nursing responsibilities in caring for the patient at the time of, and after death.

a. At the time of death--__________

b. After death--__________

TEST

12. State ways in which the nurse may help the patient's family at the time of death and after death.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

13. Select from the following list information that should be noted in patient's chart at the time of death. Write an "X" in the blank before each correct answer.

______a. Time at which pulse and respirations ceased and name of person who certified the death

______b. Whether or not a will was made

______c. Record of transfer of patient's body to specific mortuary or morgue

______d. Names of persons at patient's bedside

______e. Disposition of all of patient's belongings

(NOTE: Test question 14 is an assignment sheet. It is an important part of this test. If it has not been completed, check with your instructor.)

14. Meet the needs of dying patients and their families.

SUPPORTIVE CARE OF THE TERMINALLY ILL PATIENT
UNIT V

ANSWERS TO TEST

1. a. 6
   b. 2
   c. 5
   d. 3
   e. 10
   f. 12
   g. 7
   h. 11
   i. 4
   j. 8
   k. 1
   l. 9

2. a. 3
   b. 1
   c. 5
   d. 2
   e. 4

3. a. Nurse may fear becoming too involved
   b. Nurse is forced to face own mortality
   c. Nurse may feel guilty that nursing care was not adequate when patient dies
   d. Nurse may become frustrated that goals that were set are not being met
   e. Nurse may have difficulty in communicating honestly about feelings

4. Description should include the following
   a. Physical care
      1) To keep patient clean, dry, and free from odors
      2) To give foods and fluids as tolerated or as desired by patient
      3) To position patient for comfort and ease of breathing
      4) To provide cover as needed for warmth, as patient desires
      5) To provide mouth care frequently
      6) To change position frequently
      7) To assist with elimination needs

ANSWERS TO TEST

b. Emotional care

   1) To be available; to arrange for time to spend with patient

   2) To take time to listen to the patient and leave an open line for communication

   3) To say nothing within the patient's hearing that you would not want him or her to hear; to avoid whispering

   4) To focus on the present and help make the most of each day

   5) To allow patient to set the pace of your relationship

c. Spiritual care

   1) To notify the chaplain or the person designated by the patient

   2) To provide privacy and time for the patient and member of clergy

   3) To respect and provide for the patient's religious beliefs and practices, even though they may differ from yours

d. Environmental care

   1) To provide adequate lighting; to avoid bright lights

   2) To provide adequate circulation of air; to use room deodorants as needed

   3) To keep room or unit neat and tidy

   4) To move patient to private room if possible

5. a, b, c, e, f, g, h

6. a. Take time to sit down by the patient instead of just standing by bedside

   b. Provide privacy at all times

   c. Allow patient to express fears, anger, and frustrations

   d. Provide opportunity for patient to choose or to be in more control of what happens to his or her body in nursing care

   e. Assist patient to look after his or her appearance and compliment patient's efforts

   f. Avoid judging the patient's beliefs and actions

ANSWERS TO TEST

7. Description should include the following
    a. Guilt feelings that family did not take care of the child properly or that they did something wrong during pregnancy
    b. Frustration that they cannot do anything to stop the condition
    c. Anger at spouse, other children, or even health care providers
    d. Jealousy of a sibling for the attention patient is receiving

8. a. Assess the needs of the family by gathering background information
    b. Allow parents and families to be with child or infant as much as possible
    c. Reassure family members that they are in no way responsible for this illness
    d. Offer your support in any way to parents and family
    e. Answer all questions honestly; leave an open line of communication
    f. Avoid building false hopes; but do not destroy any hope that is there
    g. Be there when the death occurs if possible

9. a. 4
    b. 2
    c. 1
    d. 3

10. a. General slowing of the circulation with the feet; and then the hands, ears, and nose becoming cold to the touch
    b. Excessive perspiration over the body
    c. Mottled skin
    d. Irregular respirations
    e. Gradual relaxation of muscle tone with apparent sagging of tissues
    f. Gradual weakening and disappearance of reflexes
    g. Restlessness
    h. Gradual or sudden loss of ability to respond vocally
    i. Failure of pupils to react to light
    j. Gradual decrease of ability to swallow, with subsequent collection of secretions in mouth and upper respiratory tract, which may cause noisy breathing (death rales)

ANSWERS TO TEST

k. Gradual or sudden loss of consciousness or response to stimuli

l. Cessation of breathing

m. Cessation of cardiac function with loss of pulse and heart sounds

11. Description should include the following

    a. At the time of death

        1) To note time respirations and pulse ceased

        2) To check heartbeat with stethoscope

        3) To notify charge nurse and/or physician or representative

        4) Do not remove the patient's body from the unit until death has been certified by physician or representative

    b. After death

        1) To cleanse the patient's body as needed

        2) To remove any tubes and catheters

        3) To provide clean dressings

        4) To place patient's body in supine position with bed flat

        5) To close the eyes gently

        6) To elevate head on one pillow and place arms at sides

        7) To replace dentures or place them in labelled container for mortuary

        8) To leave wedding ring on patient; secure with strip of bandage, and note on chart

        9) To remove other jewelry, list, place in a package with other valuables, and note in chart

        10) To place protective pads under patient's body to absorb any urine or fecal discharge

        11) To leave identification on patient's body

        12) To place a clean gown on patient's body

        13) To obtain signatures on release form if a post-mortem or autopsy is to be performed

ANSWERS TO TEST

12. a. Allow family to be with patient if possible until death occurs

    b. Provide privacy throughout process

    c. Be an emotional support

    d. Provide a private area for the family to be together after death and while the patient's body is being prepared

    e. Ask family members if they wish to be alone with the deceased or if they want you to remain

    f. Help family make any arrangements needed

13. a, c, e

14. Evaluated to the satisfaction of the instructor

HUMAN SEXUALITY IN ILLNESS
UNIT VI

UNIT OBJECTIVE

After completing this unit, the student should be able to assess a patient's sexuality and identify common problems that might affect his or her sexuality in illness. The student should also be able to use guidelines in assisting patients who have problems that affect their sexuality. This knowledge will be shown by completing the assignment sheet and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with human sexuality in illness to their correct definitions.
2. List components that lead to sexual health as outlined by the World Health Organization.
3. Select from a list principles to follow when discussing sexual concerns.
4. List information that is obtained in a sexual history.
5. List sexual variational behaviors that *may* cause problems for an individual.
6. Match factors that contribute to sexual problems to their correct descriptions.
7. List specific problem areas nurses should be aware of that may cause sexual problems.
8. State barriers that inhibit nurses from dealing with patient's sexual problems.
9. List hospital procedures that may inhibit or cause sexual identity problems.
10. Arrange in order stages of illness.
11. Describe common reactions of patients during each stage of illness that may affect sexual behavior.
12. State reasons that hospitalized patients may act out sexually.
13. Select from a list guidelines to follow when dealing with patients who act out sexually.
14. List chronic diseases that may affect sexuality.
15. Describe effects of specific chronic diseases on patients' sexuality and the appropriate treatments.

OBJECTIVE SHEET

16. Select from a list the conditions that may affect sexuality by altering the body image.
17. State ways to help patients overcome negative feelings associated with body image changes.
18. List problems with sexuality that may be encountered by the spinal cord injury patient.
19. State ways to assist spinal cord injury patients in finding solutions to sexual problems.
20. Match drugs that may affect human sexuality to their correct descriptions.
21. Describe physical and psychological problems encountered by the patient who has experienced abortion, rape, or the contraction of veneral diseases.
22. Select from a list guidelines to follow when assisting patients to work through problems that occur after abortion, rape, and the contraction of venereal diseases.
23. Discuss situations dealing with human sexuality in illness.

HUMAN SEXUALITY IN ILLNESS
UNIT VI

SUGGESTED ACTIVITIES

I. Suggested activities

   A. Order materials planned to supplement unit--Filmstrips.

      1. *Human Sexuality and Nursing Practice.* Available from Concept Media, Box 19542, Irvine, California 92714.

      2. *Human Sexuality with Aging.* Available from Trainex Corporation, Box 116, Garden Grove, California 92642.

   B. Provide students with objective sheet.

   C. Provide students with information and assignment sheets.

   D. Discuss unit and specific objectives.

   E. Discuss information and assignment sheets.

   F. Develop appropriate learning activities for special needs students.

   G. Invite resource persons who counsel people with human sexuality problems to speak to class.

   H. Discuss students' ability to cope with fears, feelings, and concerns about dealing with these types of problems.

   I. Discuss the students' responses in Assignment Sheet #1.

   J. Give test.

   K. Reteach if necessary.

II. Instructional materials

   A. Objective sheet

   B. Suggested activities

   C. Information sheet

   D. Assignment Sheet #1--Discuss Situations Dealing with Human Sexuality in Illness

SUGGESTED ACTIVITIES

E. Answers to assignment sheet

F. Test

G. Answers to test

III. Unit reference--Woods, Nancy Fugate. *Human Sexuality in Health and Illness.* St. Louis: The C.V. Mosby Company, 1979.

IV. Additional resources

A. The Sex Information and Education Council of the United States, 84 Fifth Avenue, Suite 407, New York, New York 10011.

B. The American Association of Sex Education Counselors and Therapists, 5010 Wisconsin Avenue, Northwest, Washington, D.C. 20016.

HUMAN SEXUALITY IN ILLNESS
UNIT VI

INFORMATION SHEET

I. Terms and definitions

A. Sexuality--Sum of a person's sexual attributes, behavior, and tendencies

B. Sexual health--Integration of the physical, emotional, intellectual, and social aspects of sexual being, in ways that are positively enriching and that enhance personality, communication, and love

C. Transsexual--Individual who has an overwhelming desire to be the opposite sex

D. Homosexuality--Condition in which there is an attraction for the same sex

(NOTE: In the female, this is known as lesbianism.)

E. Transvestism--Abnormal desire to dress in the clothes of, and to be accepted as a member of the opposite sex

F. Incest--Sexual relations between a person and a very near relative

G. Zoophilia--Sexual perversion in which there is an attraction to, or preference for animals

H. Fetishism--Sexual gratification from contact with articles or objects

EXAMPLES: Hair, velvet, fur

I. Necrophilia--Sexual perversion in which there is attraction for or violation of the dead

J. Voyeur--One who seeks sexual pleasure from observing the sexual activity of others

K. Exhibitionism--An abnormal desire to expose the genitals to the opposite sex

L. Sadism--Conscious or unconscious sexual pleasure derived from inflicting mental or physical pain on others

M. Masochism--Abnormal sexual pleasure which one gains from the abuse of, or cruelty to self

N. Masturbation--Stimulation of genitals, usually to orgasm, by other means than sexual intercourse

O. Impotence--Inability to copulate

(NOTE: This term refers primarily to the male.)

INFORMATION SHEET

P. Erection--Swelling, hardness, and stiffness in the penis and to a lesser extent, in the clitoris of the female, generally due to sexual excitement

Q. Vaginismus--Painful spasm of vagina from contraction of the muscles surrounding the vagina

R. Sterility--Inability of the female to become pregnant or of the male to impregnate a female

S. Infertility--Inability or diminished ability to produce offspring

T. Rape--Crime of violence expressed in a sexual act

(NOTE: The assault may be oral, genital, or manual contact with the genitalia of a victim without the victim's consent.)

U. Abortion--Artificially induced or spontaneous expulsion of an embryo or fetus before it is viable

(NOTE: In cases of induced abortion, or one that is brought about intentionally, whether criminally or therapeutically, there may be physical and psychological effects that can later affect the sexuality of the patient.)

V. Paraplegia--Paralysis of lower portion of the body and of both legs

W. Pedophilia--Unnatural desire for sexual relations with children

X. Frigidity--Absence of sexual desire

Y. Libido--Sexual drive, conscious or unconscious

II. Components that lead to sexual health as outlined by the World Health Organization

A. Capacity to enjoy and control sexual and reproductive behavior in accord with social and personal ethics

B. Freedom from fear, shame, guilt, misconceptions, and other factors that inhibit sexual response

C. Freedom from organic disorders, diseases, and deficiencies that may interfere with either sexual or reproductive functions

III. Principles to follow when discussing sexual concerns

(NOTE: No single approach works for all patients, but there are important principles to consider when you approach any patient to assess his or her sexuality. The LPN will not routinely be asked to take sexual histories, but many times will be the one at the bedside when patient wants to express concerns.)

A. Provide privacy and reassure the patient that whatever you hear will remain in confidence

INFORMATION SHEET

B. Avoid an under- or overreaction to anything the patient tells you

C. Use the language that is used by the patient; avoid technical terms unless the patient understands medical terminology

D. Ask questions that begin with *how* or *when*, or use a broad statement that does not single out the patient and that lets patient see that the feelings or behavior is not unusual

EXAMPLES: Some women ____________; with many men ___________

E. Ask patient if he or she has any questions or other concerns that patient would like to discuss

F. Leave out your judgments and biases when talking with patients

(NOTE: Patients will be aware if you are uncomfortable with certain topics, and you will not be able to establish a rapport.)

IV. Information that is obtained in a sexual history

A. Life events or health problems that have prevented or are preventing the patient from being a mother, wife, father, or husband

B. Feelings about him- or herself as a sexual being

C. Any events that have altered the patient's sexual functioning

D. Explanation by the patient of what he or she feels is the problem

E. Intervals of time; when the problem began and how serious the problem has become

F. Patient's reasons for the cause of the problem and any solutions he or she has attempted

G. Present expectations or objectives to be reached

V. Sexual variational behaviors that *may* cause problems for an individual

(NOTE: Some of the behaviors listed here may seem appropriate for some persons. We cannot use the words *normal* and *abnormal* as guidelines in describing sexual behavior. If the behavior persists and causes the person or others stress and bodily harm, then that behavior is considered to be a problem.)

A. Transsexuality

B. Homosexuality/lesbianism

(NOTE: This behavior is more accepted and open in today's society. You may have a patient who openly admits that he or she has chosen this lifestyle, and you will need to decide how you will react.)

INFORMATION SHEET

C. Transvestism

D. Incest

E. Zoophilia

F. Fetishism

G. Necrophilia

H. Voyeurism

I. Exhibitionism

J. Sadism

K. Masochism

L. Pedophilia

VI. Factors that contribute to sexual problems

A. Biological--Factors that relate to illness, pharmacologic agents, and the aging process

B. Behavioral--Factors that result from childhood experiences, conditioning of unhealthy responses such as guilt and anxiety, and experiences felt in adulthood where disappointment in relationships was felt

C. Socioenvironmental--Factors in the social setting such as an absent partner, or environmental obstacles such as noises or interruptions from children

VII. Specific problem areas nurses should be aware of that may cause sexual problems

A. Behavioral problems

B. Anatomic disruptions

EXAMPLE: Spinal cord injuries, multiple sclerosis

C. Body image changes

D. Environmental limits

EXAMPLES: Long periods of hospitalization

E. Life events and changes

EXAMPLES: Menopause, pregnancy, advancing age

F. Physiological disorders

EXAMPLES: Diabetes, pelvic inflammatory diseases, malignancies

INFORMATION SHEET

VIII. Barriers that inhibit nurses from dealing with patient's sexual problems

- A. Nurse's value system
- B. Nurse's lack of knowledge
- C. Nurse' feelings about his or her own sexuality
- D. Nurse's inability to use communication skills effectively
- E. Nurse's fear of becoming personally involved
- F. Patient's inability to share problems

  EXAMPLES: Embarrassment or shame, social pressure

IX. Hospital procedures that may inhibit or cause sexual identity problems

- A. Questions are asked to gain information that concerns role of family, marital status, and other personal information

  EXAMPLE: Unmarried pregnant patients being asked their marital status

- B. Patients are asked to take off their usual clothes to don a hospital gown that is usually quite revealing
- C. Jewelry that gives meaning to a person's sexuality and role may be removed before procedures or surgery
- D. Privacy is often limited as procedures take place and rooms are shared with strangers
- E. Examinations of parts of the body may cause embarrassment or sexual arousal
- F. Separation from the spouse or sexual partner may cause the patient to find other outlets for sexual expression

X. Stages of illness

- A. Period of change from wellness to illness
- B. Acceptance of illness
- C. Convalescence or recovery

XI. Common reactions of patients during each stage of illness that may affect sexual behavior

- A. Period of change from wellness to illness
  - 1. Behavior that may be linked to a stereotyped idea of expected actions

    EXAMPLES: Man feels he loses his manliness if he is not active and working; woman may feel the feminine role calls for her to be passive and weak.

INFORMATION SHEET

2. Anxiety over the loss or dysfunction of any part of the body, but especially the gender identification organs

3. Guilt if hospitalization is linked to a sexual problem

4. Behavior typical of a certain culture

EXAMPLE: Many cultures are very modest to the point that it is forbidden to expose certain parts of the body.

B. Acceptance of illness

1. Dependency on others

2. Regression to an infantile or childlike stage

3. Great concern about body to the point of egocentricity

(NOTE: Many patients want to be the center of attention and will do almost anything, good or bad, to receive attention.)

4. Patient may become demanding or express dissatisfaction with caregivers to try to be more in control

C. Convalescence or recovery

1. Gratitude expressed by the patient may be interpreted as sexual attraction by the nursing staff

2. Care and attention given by the nursing staff may be viewed by the patient as flirtatious

3. Patient must give up dependent role by assuming more of self care

XII. Reasons that hospitalized patients may act out sexually

A. Patients test out the responses of others to themselves as sexual beings

B. Some patients use sexual expressions to gain control or a measure of control over situations in which they have given up some independence

C. Patients may try to reassure themselves that they are still attractive and appealing to others during or after an illness

XIII. Guidelines to follow when dealing with patients who act out sexually (Assignment Sheet #1)

A. Be aware of patient's needs to discuss sexual matters and deal with them immediately

B. Understand the patient's problems and be aware that hospitalization causes frustration and stress that might cause the sexual problems

INFORMATION SHEET

C. Avoid, if possible, experiences that would cause embarrassment or shame of patient

(NOTE: Many times, if a patient says to the nurse, "I'll bet that you are embarrassed when you have to do that" [a procedure that might have sexual implications], the patient may be embarrassed. The nurse should make sure the patient knows that it is all right to be embarrassed.)

D. Maintain as much privacy as possible

(NOTE: If possible and if conditions permit, allow the patient the time and privacy to have some type of sexual outlet.)

EXAMPLE: Masturbation may be one way patients deal with frustration.

E. Reassure the patient that anything he or she tells you will remain in confidence

XIV. Chronic diseases that may affect sexuality

A. Diabetes mellitus

B. Hypertensive vascular disease

C. Chronic renal failure

D. Cardiac disease

XV. Effects of specific chronic diseases on patients' sexuality and the appropriate treatments

A. Diabetes mellitus

1. Men have higher incidence of impotence

(NOTE: Many men have difficulty in producing and/or maintaining an erection, especially those with diabetes of long duration with secondary complications.)

2. Women have fewer problems that men, but studies have shown some sexual dysfunction in a variety of areas

EXAMPLES: Reduced libido, chronic vaginitis, defective or early atrophy of ovaries and uterus

3. Women with diabetes mellitus have a higher rate of abortions, stillbirths, high birth weight infants, and malformed infants

4. Treatment for male impotence has been successful with use of specific hormones if erectile dysfunction has not become severe

INFORMATION SHEET

5. Couples with diabetes in male, female, or both histories should have genetic counseling before considering having children

   (NOTE: Studies have been made concerning the incidence of children being born to one or two diabetic parents. If both parents have diabetes, there is a 60 percent chance that the child will be diabetic.)

B. Hypertensive vascular disease

(NOTE: Hypertension increases work of left ventricular area and causes a reduced cardiac output; antihypertensive drugs may cause sexual dysfunction.)

1. Sustained exertion and rapid heart beat that is produced from sexual activity may cause a rapid backward pressure and pulmonary edema
2. Fear of a cerebrovascular accident (stroke) may cause the male to have performance dysfunction; counseling may be helpful to this patient

C. Chronic renal disease

1. In both men and women, frequency of sexual relations is decreased

   (NOTE: During the illness and dialysis phase, men are found to be more prone to impotence; both sexes have a decreased sexual drive.)

2. Breast enlargement, tenderness, and smaller testes are noted in men during the illness
3. Both men and women have lowered fertility functions: men produce fewer sperm; women have erratic menstrual periods during the illness and dialysis stage of the disease
4. In the postdialysis period, and/or if transplantation of a new kidney has occurred, both men and women may have renewed sexual drive and a return of fertility functions
5. Hormones may be used in many cases to treat symptomatic effects of the disease

   EXAMPLE: Testosterone

D. Cardiac disease

(NOTE: During phases of sexual intercourse, the heart rate, respiratory rate, and blood pressure increase. Effects of sexual relations will depend on the individual and the involvement and condition of the cardiovascular system.)

1. Fear of impotence causes many men to act out sexually, especially those who have just experienced a heart attack
2. Fear of having a heart attack may result in male impotence

INFORMATION SHEET

3. Women experience fewer sexual dysfunction effects than men

4. Most important part of treatment for both men and women is counseling from the onset of the disease

   (NOTE: Counseling will include a timetable of recommended time limits for patients to follow in resuming sexual relations, specific positions to assume in intercourse, and open communication between sexual partners to develop an understanding of the condition.)

XVI. Conditions that may affect sexuality by altering the body image

(NOTE: These conditions may alter body image in a negative or positive manner.)

A. Mastectomy

B. Hysterectomy

C. Enterostomy reconstruction

(NOTE: This includes ileostomy and colostomy procedures.)

D. Mammoplasty

E. Reconstructive surgery

F. Surgical scars

XVII. Ways to help patients overcome negative feelings associated with body image changes (Assignment Sheet #1)

A. Allow patients time and privacy to work through their feelings

B. React to patient's altered image without outward reactions of repulsion, pity, or embarrassment

C. Reassure patients that they will still be able to function sexually if this is true

D. Invite volunteer from appropriate group to visit patients as soon as you feel they are receptive

(NOTE: With physician's approval, contact Reach to Recovery group, the association that works with mastectomy patients, and the Ostomy Club, the association that works with patients who have had ostomies performed, and request that a volunteer visit your patient.)

E. Allow patients to assist you and finally perform care for surgical area as soon as they are physically and psychologically ready

F. Observe the hysterectomy patient carefully for any signs of depression; address any concerns the patient may have concerning sexual functioning after the surgery

INFORMATION SHEET

G. Be aware of any concerns felt by patients or spouses; answer questions honestly, and obtain a resource person if needed for counseling

(NOTE: A new specialty in nursing is the ostomy specialist, or clinician who works entirely with ostomy patients.)

XVIII. Problems with sexuality that may be encountered by the spinal cord injury patient

A. Role change from independent head of household and provider to a more dependent role

B. Limited mobility

C. Physical problems that may affect bowel and/or bladder control

(NOTE: Many patients will have external or internal catheters and possibly an ostomy that may produce both physical and emotional problems.)

D. Neurological interruption of nerve pathways that provide sensory input in erectile tissue needed in sexual functions

E. Impotence resulting from many different factors

XIX. Ways to assist spinal cord injury patients in finding solutions to sexual problems

A. Develop open communication with patients

B. Provide assistance where needed or refer to resource person for counseling for physical or psychological problems

C. Reassure patients and encourage rehabilitation to assist in preparing them for more independent roles

XX. Drugs that may affect human sexuality

(NOTE: Many drugs and combinations of chemicals are supposed to produce a strong aphrodisiac reaction, to stimulate a strong sex drive. Use of many of the substances can be very dangerous to the user.)

A. Oral contraceptives--Hormonal combinations that inhibit ovulation in the menstrual cycle; have greatly contributed to more sexual freedom

B. Antihypertensive drugs--Produce vasodilation by means of sympathetic nervous system; may result in impotence and decrease in sexual function

C. Antidepressants--Variety of drugs that produce impotence and decrease in sexual drive, depending on the action of the chemical used

D. Antihistamines--Produce a block of parasympathetic nerve impulses to sex glands and organs; alter the sexual functions if used continuously

INFORMATION SHEET

E. Saltpeter--Potassium nitrate that is notorious for being used in prisons and other institutions where sexual activity is discouraged; actually has no effect on sexual functions or potency

(NOTE: The only way saltpeter could deter sexual activity is through its use as a mild diuretic that increases urine flow.)

F. Barbiturates--Used as sedatives, hypnotics; produce a general depression on all nervous tissue; may depress sexual function and ability by slowing down responses; have no real bearing on sexual activity

G. Alcohol--Depressant that may enhance sexual activity by allowing a more relaxed state; an excess of intake may result in decreased sexual function

H. Sedatives and tranquilizers--Sedative effect may cause impotence, decreased libido, and other dysfunctions of sexual organs

I. Methadone--Drug used in heroin withdrawal and narcotics rehabilitation programs; has caused fertility problems and sexual performance dysfunctions as changes in the size and activity of sex organs take place

J. Cantharis (Spanish fly)--A powerful irritant and a systemic poison that causes serious illness, irritation of the genitourinary tract, and prolonged erections

(NOTE: This drug is not a sexual stimulant and can be very dangerous when taken internally.)

K. Psychoactive drugs--Drugs such as morphine, LSD, cocaine, marijuana, and uppers or stimulants that may seem to enhance sexual activity by altering the state of the mind and releasing some inhibitions; but in reality they decrease sexual behavior of those who are continuous users

L. Vitamin E--No real sexual powers are derived from the intake of this supplement

XXI. Physical and psychological problems encountered by the patient who has experienced abortion, rape, or the contraction of venereal diseases

A. Abortion

1. Physical complications of an abortion might include lacerations, hemorrhage, infections, and sterility

2. Psychologically, an abortion can produce feelings of guilt, remorse, depression, and possibly a negative feeling about the person's sexuality

(NOTE: Psychologically the guilt, remorse, and negative feelings can also be noted in the male's reactions when he is aware or has been a part of the decision to have the abortion.)

INFORMATION SHEET

B. Rape

1. Physically, damage can be as minor as bruising of the outer genitalia, or as major as massive tearing of the internal organs and hemorrhage, that requires surgical intervention and can later prevent normal sexual functioning; impregnation may occur

   (NOTE: Many children who are molested will require surgery if full penetration has taken place. Women who have been raped sometimes find later sexual relations difficult because of vaginismus due to physical or mental condition.)

2. Psychologically, the victim may feel fear, guilt, and enormous emotional distress for many years after the attack

   (NOTE: Women who know their attacker may be made to feel that possibly it was not a forced attack, but that they provoked the rapist. Women who do not know their attacker feel an anger and frustration based on "why me" and wonder what they did to attract the rapist.)

C. Venereal diseases

(NOTE: Venereal diseases can be contracted during rape, leaving the victim with a compound problem.)

1. Physically, the victim can be affected by the symptomatic effects of the disease and the possibility of long-range aftereffects such as sterility

2. Psychologically, the victim feels anger and resentfulness toward the carrier and an embarrassment when seeking treatment

   (NOTE: It is especially stressful when the carrier is a loving, trusted spouse or a sexual partner that is close. Relationships often dissolve and many divorces occur after the truth is disclosed about the carrier and the contact.)

XXII. Guidelines to follow when assisting patients to work through problems that occur after abortion, rape, and the contraction of venereal diseases

(NOTE: If a nurse has any feelings or beliefs concerning giving care for any patient with these problems, he or she should make these known to the employer before becoming employed.)

A. Abortion

1. Nurse should understand and work through his or her own feelings concerning the issue of abortion and the right to life before attempting to assist the patient

2. If the nurse does not want to treat and care for the patient because of personal philosophies or religious beliefs, then it is his or her right to ask to be assigned to another patient

INFORMATION SHEET

3. Patient should be allowed to express feelings openly and to voice any concerns for future sexual functioning

   (NOTE: Resource persons should be made available to patient and spouse or sexual partner to plan future.)

B. Rape

1. Nurse should be prepared for a variety of reactions from the victim and leave an open line of communication

2. Nurse should obtain resource person for counseling if needed

C. Venereal diseases

1. Nurse should respect the patient's right for privacy and reassure patient that the treatment is confidential

2. Nurse should understand patient's feelings of embarrassment, anger, and hostility

HUMAN SEXUALITY IN ILLNESS
UNIT VI

ASSIGNMENT SHEET #1--DISCUSS SITUATIONS DEALING WITH HUMAN SEXUALITY IN ILLNESS

NAME ____________________ SCORE ____________

Dealing with situations concerning another person's sexuality can be difficult. The nurse should remember that sexuality is another aspect in an individual's wholeness. If we are to consider the holistic approach in nursing we must be aware that sexual functioning is an important part of the human's complicated life process. If you can approach sexuality and sexual problems maturely and openly, you can be a valuable resource person able to meet the needs of your patients.

In this assignment sheet you will be given four case studies to discuss. These are common situations that are found daily in every hospital. Read the following case studies and discuss each as indicated, then compare findings with your classmates.

Case Study #1

Charles McDonald, a 52-year-old farmer, nearly lost a leg in a farm accident two months ago. Through many hours of surgery his leg has been saved, but he has a long period of recovery ahead of him. His wife remained on the farm some 50 miles away, and he has few visitors coming to see him. Mr. McDonald is confined to bed due to the external fixation of traction equipment. Skin care is essential to prevent decubitus ulcers from forming. Yesterday Mr. McDonald told you what a nice figure you had and asked you if you had many men friends. Today as you help him with his bath, he comments on how lonely it is in the hospital and that he is so tired of lying in bed. His hand casually slips down and caresses your leg.

YOUR IMMEDIATE RESPONSE WOULD BE: ____________________

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HOW WOULD YOU HELP MR. MCDONALD IN THIS SITUATION: ____________

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ASSIGNMENT SHEET #1

Case Study #2

Jimmy Howard, age 17, is now into his second week of hospitalization. He has been treated for gastroenteritis and is sharing a ward room with three other teenagers. In the first week of hospitalization, he was acutely ill and had few visitors other than his parents and brother. This week he is going through a series of diagnostic tests and feels better. You are making rounds at 9:30 P.M. after visiting hours are over. As you enter the room, you find Jimmy and a young woman sharing his bed, arms around each other, completely oblivious of your entrance.

YOUR IMMEDIATE RESPONSE WOULD BE: ____________________

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HOW WOULD YOU HANDLE THIS SITUATION: ____________________

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ASSIGNMENT SHEET #1

Case Study #3

Sharon Stratfield, age 31, has been admitted to your unit to be made ready for surgery early in the morning. She has been beaten and raped by an unknown assailant who broke into her apartment late in the night. In the ER she has been examined and treated for superficial contusions and lacerations. You are to prepare her for extensive surgery for internal lacerations. As you enter the room to take vital signs and give Ms. Stratfield the sedative, she leaps from the bed and runs to the window. She pulls open the drapes and cries, "I know he is out there and waiting for me. He wants to kill me this time, I am sure." You get her back into bed and give her the sedative. After you reassure her and sit quietly for some time, Ms. Stratfield begins to ask you questions. "Will I be damaged inside forever? Am I going to get pregnant? What will I tell my parents? What will I tell my boyfriend? Why did it have to be me? I thought I was so careful."

YOUR IMMEDIATE RESPONSE WOULD BE:______________________________

HOW WOULD YOU HELP SHARON AT THIS TIME?________________________

WHAT WOULD BE YOUR CONCERNS FOR SHARON AFTER SURGERY?__________

ASSIGNMENT SHEET #1

Case Study #4

Mike Stevens, age 38, is a new colostomy patient. His colostomy was made after an obstruction was found that required the removal of a portion of the intestine. A week after the surgery, Mike still does not want any part of caring for the stoma or to discuss the appliance that he will wear. Mike was just accepted as a junior partner in a law firm that handles a large corporation's legal matters. His wife Judy has been to see him each day, but the visit appears quite unpleasant for both of them. Each time you enter the room, Judy is sitting in the corner of the room, looking out the window, and Mike is reading a legal form. When you mention the possibility of Judy assisting in the care of the colostomy, Mike throws all his papers and briefcase on the floor and orders her to leave. Judy leaves with a relieved look on her face. After Mike quiets down, he tells you that he is repulsed by his condition and that he knows Judy can't stand to look at him. He is only half a man and he would rather not live than go through life like this.

WHAT WAS YOUR FIRST MISTAKE IN THIS CASE:________________________

WHAT WOULD YOUR RESPONSE BE NOW?________________________

HOW COULD YOU HELP MIKE AND JUDY STEVENS WORK THROUGH THIS SITUATION:________________________

HUMAN SEXUALITY IN ILLNESS
UNIT VI

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

HUMAN SEXUALITY IN ILLNESS
UNIT VI

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with human sexuality in illness to their correct definitions. Write the correct numbers in the blanks. Terms and definitions are continued on the next page.

______a. Abnormal sexual pleasure which one gains from the abuse of or cruelty to self

______b. Sexual perversion in which there is an attraction to, or preference for animals

______c. Sum of a person's sexual attributes, behavior, and tendencies

______d. Sexual perversion in which there is attraction for or violation of the dead

______e. Stimulation of genitals, usually to orgasm, by other means than sexual intercourse

______f. Sexual relations between a person and a very near relative

______g. Condition in which there is an attraction for the same sex

______h. Sexual gratification from contact with articles or objects

______i. Inability to copulate

______j. Swelling, hardness, and stiffness in the penis and to a lesser extent, in the clitoris of the female, generally due to sexual excitement

______k. Abnormal desire to dress in the clothes of, and to be accepted as a member of the opposite sex

______l. One who seeks sexual pleasure from observing the sexual activity of others

______m. Conscious or unconscious sexual pleasure derived from inflicting mental or physical pain on others

1. Masochism
2. Sexuality
3. Necrophilia
4. Impotence
5. Erection
6. Voyeur
7. Zoophilia
8. Masturbation
9. Incest
10. Transvestism
11. Fetishism
12. Homosexuality
13. Sadism

TEST

______n. Artificially induced or spontaneous expulsion of embryo or fetus before it is viable

______o. Painful spasm of vagina from contraction of the muscles surrounding the vagina

______p. Inability or diminished ability to produce offspring

______q. Individual who has an overwhelming desire to be the opposite sex

______r. Inability of the female to become pregnant or of the male to impregnate a female

______s. Crime of violence expressed in a sexual act

______t. Paralysis of lower portion of the body and of both legs

______u. Integration of the physical, emotional, intellectual, and social aspects of sexual being, in ways that are positively enriching and that enhance personality, communication, and love

______v. An abnormal desire to expose the genitals to the opposite sex

______w. Absence of sexual desire

______x. Unnatural desire for sexual relations with children

______y. Sexual drive, conscious or unconscious

14. Abortion
15. Vaginismus
16. Transsexual
17. Infertility
18. Sterility
19. Rape
20. Exhibitionism
21. Paraplegia
22. Sexual health
23. Pedophilia
24. Frigidity
25. Libido

2. List components that lead to sexual health as outlined by the World Health Organization.

a. ______________________________

____

b. ______________________________

____

c. ______________________________

____

TEST

3. Select from the following list principles to follow when discussing sexual concerns. Write an "X" in the blank before each correct answer.

_____a. Use your own emotions as guidelines to follow when discussing sexual concerns

_____b. Provide privacy and reassure the patient that whatever you hear will remain in confidence

_____c. Use the language that is used by the patient; avoid technical terms unless the patient understands the medical terminology

_____d. Express your personal opinions concerning patient's problem area

_____e. Ask patient if he or she has any questions or concerns that patient would like to discuss

_____f. Avoid an under- or overreaction to anything the patient tells you

_____g. Leave out your judgments and biases when talking with patients

_____h. Ask questions that begin with *how* or *when*, or use a broad statement that does not single out the patient and that lets patient see that the feelings or behavior is not unusual

_____i. Become personally involved and develop close relationships to build better rapport

_____j. Avoid any eye contact to lessen anxiety

4. List information that is obtained in a sexual history.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

g. ______________________________

5. List sexual variational behaviors that *may* cause problems for an individual.

a. ______________________________

b. ______________________________

c. ______________________________

TEST

d. ____________________

e. ____________________

f. ____________________

g. ____________________

h. ____________________

i. ____________________

j. ____________________

k. ____________________

l. ____________________

6. Match factors that contribute to sexual problems to their correct descriptions. Write the correct numbers in the blanks.

_____a. Factors that result from childhood experiences, conditioning of unhealthy responses such as guilt and anxiety, and experiences felt in adulthood where disappointment in relationships was felt

_____b. Factors in the social setting such as an absent partner, or environmental obstacles such as noises or interruptions from children

_____c. Factors that relate to illness, pharmacologic agents, and the aging process

1. Socioenvironmental
2. Biological
3. Behavioral

7. List specific problem areas nurses should be aware of that may cause sexual problems.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

f. ____________________

TEST

8. State barriers that inhibit nurses from dealing with patient's sexual problems.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

9. List hospital procedures that may inhibit or cause sexual identity problems.

a. ______________________________

____

b. ______________________________

____

c. ______________________________

____

d. ______________________________

____

e. ______________________________

____

f. ______________________________

____

10. Arrange in order stages of illness. Write a "1" before the first step, a "2" before the second step, and so on.

_____a. Acceptance of illness

_____b. Period of change from wellness to illness

_____c. Convalescence or recovery

TEST

11. Describe common reactions of patients during each stage of illness that may affect sexual behavior.

    a. Period of change from wellness to illness--____________________

    b. Acceptance of illness--____________________

    c. Convalescence or recovery--____________________

12. State reasons that hospitalized patients may act out sexually.

    a. ____________________

    b. ____________________

    c. ____________________

TEST

13. Select from the following list guidelines to follow when dealing with patients who act out sexually. Write an "X" in the blank before each correct answer.

_____a. Avoid, if possible, experiences that would cause embarrassment or shame of patient

_____b. Interject your own personal standards as a comparison

_____c. Take another staff member with you to observe patient's behavior

_____d. Understand the patient's problems and be aware that hospitalization causes frustration and stress that might cause the sexual problems

_____e. Be aware of patient's needs to discuss sexual matters and deal with them immediately

_____f. Be sure to write patient's behavior in red on Kardex to alert other staff members

_____g. Maintain as much privacy as possible

_____h. Reassure the patient that anything he or she tells you will remain in confidence

14. List chronic diseases that may affect sexuality.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

15. Describe effects of specific chronic diseases on patients' sexuality and the appropriate treatments.

a. Diabetes mellitus--____________________

____

____

____

____

____

____

____

TEST

b. Hypertensive vascular disease--______________________________

c. Chronic renal disease--______________________________

d. Cardiac disease--______________________________

16. Select from the following list the conditions that may affect sexuality by altering the body image. Write an "X" in the blank before each correct answer.

_____a. Hysterectomy

_____b. Tonsilectomy

_____c. Cystoscopy

TEST

_____d. Mastectomy

_____e. Enterostomy reconstruction

_____f. Mammoplasty

_____g. Adenoidectomy

_____h. Reconstructive surgery

_____i. Surgical scars

17. State ways to help patients overcome negative feelings associated with body image changes.

a. ____________________

____

b. ____________________

____

c. ____________________

____

d. ____________________

____

e. ____________________

____

f. ____________________

____

g. ____________________

____

18. List problems with sexuality that may be encountered by the spinal cord injury patient.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

TEST

19. State ways to assist spinal cord injury patients in finding solutions to sexual problems.

a. ____

b. ____

c. ____

20. Match drugs that may affect human sexuality to their correct descriptions. Write the correct numbers in the blanks. Descriptions are continued on the next page.

_____a. Variety of drugs that produce impotence and decrease in sexual drive, depending on the action of the chemical used

_____b. Depressant that may enhance sexual activity by allowing a more relaxed state; an excess of intake may result in decreased sexual function

_____c. Potassium nitrate that is notorious for being used in prisons and other institutions where sexual activity is discouraged; actually has no effect on sexual functions or potency

_____d. Sedative effect may cause impotence, decreased libido, and other dysfunctions of sexual organs

_____e. Hormonal combinations that inhibit ovulation in the menstrual cycle; have greatly contributed to more sexual freedom

_____f. Used as sedatives, hypnotics; produce a general depression on all nervous tissue; may depress sexual function and ability by slowing down responses; have no real bearing on sexual activity

_____g. Drug used in heroin withdrawal and narcotics rehabilitation programs; has caused fertility problems and sexual performance dysfunctions as changes in the size and activity of sex organs take place

_____h. Produce a block of parasypathetic nerve impulses to sex glands and organs; alter the sexual functions if used continuously

_____i. Produce vasodilation by means of sympathetic nervous system; may result in impotence and decrease in sexual function

1. Antidepressants
2. Saltpeter
3. Alcohol
4. Sedatives and tranquilizers
5. Methadone
6. Antihistamines
7. Antihypertensive drugs
8. Barbiturates
9. Oral contraceptives
10. Cantharis (Spanish fly)
11. Vitamin E
12. Psychoactive drugs

TEST

_____j. No real sexual powers are derived from the intake of this supplement

_____k. A powerful irritant and a systemic poison that causes serious illness, irritation of the genitourinary tract, and prolonged erections

_____l. Drugs such as morphine, LSD, cocaine, marijuana, and uppers or stimulants that may seem to enhance sexual activity by altering the state of the mind and releasing some inhibitions; but in reality they decrease sexual behavior of those who are continuous users

21. Describe physical and psychological problems encountered by the patient who has experienced abortion, rape, or the contraction of venereal diseases.

a. Abortion-- ____
____
____
____
____
____

b. Rape-- ____
____
____
____
____
____

c. Venereal diseases-- ____
____
____
____
____
____

TEST

22. Select from the following list guidelines to follow when assisting patients to work through problems that occur after abortion, rape, and the contraction of venereal diseases. Write an "X" in the blank before each correct answer.

a. Abortion

_____1) Nurse should understand and work through his or her own feelings concerning the issue of abortion and the right to life before attempting to assist the patient

_____2) Nurse should voice her or his belief as to whether abortion is right or wrong

_____3) Patient should be allowed to express feelings openly and to voice any concerns for future sexual functioning

_____4) If the nurse does not want to treat and care for the patient because of personal philosophies or religious beliefs, then it is his or her right to ask to be assigned to another patient

_____5) Patient's Kardex should be flagged in red

b. Rape

_____1) Nurse should be prepared for a variety of reactions from the victim and leave an open line of communication

_____2) Nurse should obtain resource person for counseling if needed

_____3) Nurse should have a family planning counselor talk to patient as soon as possible

c. Venereal diseases

_____1) Nurse should respect the patient's right for privacy and reassure patient that the treatment is confidential

_____2) Nurse should take the responsibility to call all of patient's contacts as soon as possible

_____3) Nurse should understand patient's feelings of embarrassment, anger, and hostility

(NOTE: Test question 23 lists the assignment sheet. It is an important part of this test. If it has not been completed, check with your instructor.)

23. Discuss situations dealing with human sexuality in illness.

HUMAN SEXUALITY IN ILLNESS
UNIT VI

ANSWERS TO TEST

1.

a.	1	j.	5	s.	19
b.	7	k.	10	t.	21
c.	2	l.	6	u.	22
d.	3	m.	13	v.	20
e.	8	n.	14	w.	24
f.	9	o.	15	x.	23
g.	12	p.	17	y.	25
h.	11	q.	16		
i.	4	r.	18		

2. a. Capacity to enjoy and control sexual and reproductive behavior in accord with social and personal ethics

   b. Freedom from fear, shame, guilt, misconceptions, and other factors that inhibit sexual response

   c. Freedom from organic disorders, diseases, and deficiencies that may interfere with either sexual or reproductive functions

3. b, c, e, f, g, h

4. a. Life events or health problems that have prevented or are preventing the patient from being a mother, wife, father, or husband

   b. Feelings about him- or herself as a sexual being

   c. Any events that have altered the patient's sexual functioning

   d. Explanation by the patient of what he or she feels is the problem

   e. Intervals of time; when the problem began and how serious the problem has become

   f. Patient's reasons for the cause of the problem and any solutions he or she has attempted

   g. Present expectations or objectives to be reached

ANSWERS TO TEST

5. a. Transsexuality
   b. Homosexuality/lesbianism
   c. Transvestism
   d. Incest
   e. Zoophilia
   f. Fetishism
   g. Necrophilia
   h. Voyeurism
   i. Exhibitionism
   j. Sadism
   k. Masochism
   l. Pedophilia

6. a. 3
   b. 1
   c. 2

7. a. Behavioral problems
   b. Anatomic disruptions
   c. Body image changes
   d. Environmental limits
   e. Life events and changes
   f. Physiological disorders

8. a. Nurse's value system
   b. Nurse's lack of knowledge
   c. Nurse's feelings about his or her own sexuality
   d. Nurse's inability to use communication skills effectively
   e. Nurse's fear of becoming personally involved
   f. Patient's inability to share problems

9. a. Questions are asked to gain information that concerns role of family, marital status, and other personal information
   b. Patients are asked to take off their usual clothes to don a hospital gown that is usually quite revealing
   c. Jewelry that gives meaning to a person's sexuality and role may be removed before procedures or surgery
   d. Privacy is often limited as procedures take place and rooms are shared with strangers

ANSWERS TO TEST

e. Examinations of parts of the body may cause embarrassment or sexual arousal

f. Separation from the spouse or sexual partner may cause the patient to find other outlets for sexual expression

10. a. 2

b. 1

c. 3

11. Descriptions should include the following

a. Period of change from wellness to illness

1) Behavior that may be linked to a sterotyped idea of expected actions

2) Anxiety over the loss or dysfunction of any part of the body, but especially the gender identification organs

3) Guilt if hospitalization is linked to a sexual problem

4) Behavior typical of a certain culture

b. Acceptance of illness

1) Dependency on others

2) Regression to an infantile or childlike stage

3) Great concern about body to the point of egocentricity

4) Patient may become demanding or express dissatisfaction with caregivers to try to be more in control

c. Convalescence or recovery

1) Gratitude expressed by the patient may be interpreted as sexual attraction by the nursing staff

2) Care and attention given by the nursing staff may be viewed by the patient as flirtatious

3) Patient must give up dependent role by assuming more of self care

12. a. Patients test out the responses of others to themselves as sexual beings

b. Some patients use sexual expressions to gain control or a measure of control over situations in which they have given up some independence

c. Patients may try to reassure themselves that they are still attractive and appealing to others during or after an illness

ANSWERS TO TEST

13. a, d, e, g, h

14. a. Diabetes mellitus

    b. Hypertensive vascular disease

    c. Chronic renal failure

    d. Cardiac disease

15. Descriptions should include the following

    a. Diabetes mellitus

       1) Men have higher incidence of impotence

       2) Women have fewer problems than men, but studies have shown some sexual dysfunction in a variety of areas

       3) Women with diabetes mellitus have a higher rate of abortions, stillbirths, high birth weight infants, and malformed infants

       4) Treatment for male impotence has been successful with use of specific hormones if erectile dysfunction has not become severe

       5) Couples with diabetes in male, female, or both histories should have genetic counseling before considering having children

    b. Hypertensive vascular disease

       1) Sustained exertion and rapid heart beat that is produced from sexual activity may cause a rapid backward pressure and pulmonary edema

       2) Fear of a cerebrovascular accident (stroke) may cause the male to have performance dysfunction; counseling may be helpful to this patient

    c. Chronic renal disease

       1) In both men and women, frequency of sexual relations is decreased

       2) Breast enlargement, tenderness, and smaller testes are noted in men during the illness

       3) Both men and women have lowered fertility functions: men produce fewer sperm; women have erratic menstrual periods during the illness and dialysis stage of the disease

       4) In the postdialysis period, and/or if transplantation of a new kidney has occurred, both men and women may have renewed sexual drive and a return of fertility functions

       5) Hormones may be used in many cases to treat symptomatic effects of the disease

ANSWERS TO TEST

d. Cardiac disease

   1) Fear of impotence causes many men to act out sexually, especially those who have just experienced a heart attack

   2) Fear of having a heart attack may result in male impotence

   3) Women experience fewer sexual dysfunction effects than men

   4) Most important part of treatment for both men and women is counseling from the onset of the disease

16. a, d, e, f, h, i

17. a. Allow patients time and privacy to work through their feelings

    b. React to patient's altered image without outward reactions of repulsion, pity, or embarrassment

    c. Reassure patients that they will still be able to function sexually if this is true

    d. Invite volunteer from appropriate group to visit patients as soon as you feel they are receptive

    e. Allow patients to assist you and finally perform care for surgical area as soon as they are physically and psychologically ready

    f. Observe the hysterectomy patient carefully for any signs of depression; address any concerns the patient may have concerning sexual functioning after the surgery

    g. Be aware of any concerns felt by patients or spouses; answer questions honestly, and obtain a resource person if needed for counseling

18. a. Role change from independent head of household and provider to a more dependent role

    b. Limited mobility

    c. Physical problems that may affect bowel and/or bladder control

    d. Neurological interruption of nerve pathways that provide sensory input in erectile tissue needed in sexual functions

    e. Impotence resulting from many different factors

19. a. Develop open communication with patients

    b. Provide assistance where needed or refer to resource person for counseling for physical or psychological problems

    c. Reassure patients and encourage rehabilitation to assist in preparing them for more independent roles

ANSWERS TO TEST

20.

a.	1	e.	9	i.	7
b.	3	f.	8	j.	11
c.	2	g.	5	k.	10
d.	4	h.	6	l.	12

21. Descriptions should include the following

    a. Abortion

        1) Physical complications of an abortion might include lacerations, hemorrhage, infections, and sterility

        2) Psychologically, an abortion can produce feelings of guilt, remorse, depression, and possibly a negative feeling about the person's sexuality

    b. Rape

        1) Physically, damage can be as minor as bruising of the outer genitalia or as major as massive tearing of the internal organs and hemorrhage, that requires surgical intervention and can later prevent normal sexual functioning

        2) Psychologically, the victim may feel fear, guilt, and enormous emotional distress for many years after the attack

    c. Venereal diseases

        1) Physically, the victim can be affected by the symptomatic effects of the disease and the possibility of long-range aftereffects such as sterility

        2) Psychologically, the victim feels anger and resentfulness toward the carrier and an embarrassment when seeking treatment

22. a. Abortion--1, 3, 4

    b. Rape--1, 2

    c. Venereal diseases--1, 3

23. Evaluated to the satisfaction of the instructor

CARE OF THE OLDER ADULT
UNIT VII

UNIT OBJECTIVE

After completing this unit, the student should be able to design a care center and plan and carry out an activity for care center residents. This knowledge will be shown by completing assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with the care of the older adult to their correct definitions.
2. State reasons for studying older adults.
3. Describe Erikson's developmental stage of "integrity versus despair."
4. Select from a list major concerns of the older adult.
5. Describe common fears of the older adult.
6. Select from a list goals of reality orientation.
7. State ways to carry out reality orientation in a care center and in the community.
8. Discuss remotivation techniques.
9. Describe changes in body systems that commonly occur in the older adult and their related problems, treatment, and preventive measures.
10. Select from a list methods of assisting the older adult to achieve wellness.
11. State guidelines in assisting the older adult in dealing with emotional and mental problems.
12. List common support agencies or groups that assist in maintaining independent status of the older adult.
13. Describe ways to assist the the older adult in hygiene needs.
14. Describe ways to protect the older adult from common hazards.
15. Select from a list advantages and disadvantages of types of living facilities available for the older adult.
16. Describe personal qualities needed by persons who provide care specifically for the older adult.

OBJECTIVE SHEET

17. Select from a list basic facts concerning human sexuality in the older adult.
18. Analyze lifestyles of older adults living independently and older adults living in a care facility.
19. Develop plan for a care center.
20. Plan and carry out activity for care center residents.

CARE OF THE OLDER ADULT
UNIT VII

SUGGESTED ACTIVITIES

I. Suggested activities

   A. Order materials planned to supplement unit.

      1. Filmstrips

         a. *Biological Changes of Aging: Function and Capacity*

         b. *Biological Changes of Aging: Physical Appearance and the Special Senses*

         c. *The Challenges of Aging: Change and Loss*

         d. *Gerontological Nursing: A New Breed, A Growing Need*

         e. *Growing Old in America: A Cultural Perspective*

         f. *Human Sexuality with Aging*

         (NOTE: The above filmstrips are available from the Trainex Corporation, P.O. Box 116, Garden Grove, California 92642.)

         g. *Human Development: Successful Aging*

         h. *Perspectives on Aging*

         (NOTE: Filmstrips *g* and *h* are available from Concept Media, P.O. Box 19542, Irvine, California 92714.)

      2. Film--*Wild Goose.* Black and white, 19 minutes, Films Incorporated. Available from Films Incorporated, 733 Green Bay Road, Wilmette, Illinois 60091.

         (NOTE: This film is available on a free-loan basis only to Oklahoma teachers from the Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1500 West Seventh Avenue, Stillwater, Oklahoma 74074. Out-of-state teachers must order from the address above.)

   B. Provide students with objective sheet.

   C. Provide students with information and assignment sheets.

   D. Discuss unit and specific objectives.

   E. Discuss information and assignment sheets

   F. Develop appropriate learning activities for special needs students.

SUGGESTED ACTIVITIES

G. Review Erikson's developmental stages.

H. Invite a gerontologist to speak to the class on care for the older adult.

I. Invite several older adults to be part of a panel discussion.

(NOTE: Ask them to speak on their past or the present related to their lifestyles.)

J. Take a field trip to a retirement center, extended care center and a nursing home so that students may compare facilities.

K. Have each class member or the entire class adopt a grandparent for the school year.

(NOTE: This would be an excellent HOSA project that you could do for the entire year. Visits, parties, and trips to special places would certainly cheer any older adult and bring rewards to each member of the class.)

L. Provide references for students to use in completing Assignment Sheet #2.

M. Assist students in planning and carrying out activities in Assignment Sheet #2.

N. Obtain information from the various groups listed below on their functions in assisting older adults.

1. Areawide Aging Agency
Box 1474
Oklahoma City, Oklahoma 73101
Charlotte Heard, Executive Director

2. Daily Living Center
3000 Pershing Blvd.
Oklahoma City, Oklahoma 73100
Lisa Owens, Director

3. Oklahoma Alliance on Aging
P. O. Box 1418
Oklahoma City, Oklahoma 73101
Vivian Smith, Chairman

4. Salvation Army Senior Citizens Program
P.O. Box 25516
Oklahoma City, Oklahoma 73125
Nina Willingham, Executive Director

5. American Health Care Association
1200 15th Street N.W.
Washington, D.C. 20005
(202) 833-2050

6. Gray Panthers
Long-Term Care Action Project
3700 Chestnut Street
Philadelphia, Pennsyvania 19104
(215) 382-3546

7. Citizens for Better Care
960 Jefferson Avenue E.
Detroit, Michigan 48207
(313) 963-0513

8. Citizens for the Improvement of Nursing Homes
9103 - 32nd Avenue N.E.
Seattle, Washington 98115
(206) 523-1211

SUGGESTED ACTIVITIES

9. Citizens for Better Nursing Home Care, Inc.
   P.O. Box 90920
   Milwaukee, Wisconsin 53202
   (414) 224-0460

10. Denver Gray Panthers
    1400 Lafayette
    Denver, Colorado 80218
    (303) 832-5618

11. Friends and Relatives of Nursing Home Patients
    1765 East 26th
    Eugene, Oregon 97403
    (503) 343-7888

12. Minneapolis Age & Opportunity Center, Inc.
    1801 Nicollet Ave. South
    Minneapolis, Minnesota 55403
    (612) 874-5525

13. National Consumers League
    1785 Massachusetts Ave. N.W.
    Washington, D.C. 20036
    (202) 797-7600

14. New York Gray Panther Nursing Home Action Group
    424 East 62nd Street
    New York, New York 10021
    (212) 755-0876

15. Northwest Interfaith Movement
    Greene St. at Westview
    Philadelphia, Pennsylvania 19119
    (215) 843-5600

O. Give test.

P. Reteach if necessary.

II. Instructional materials

- A. Objective sheet
- B. Suggested activities
- C. Information sheet
- D. Assignment sheets
  1. Assignment Sheet #1--Analyze Lifestyles of Older Adults Living Independently and Older Adults Living In a Care Facility
  2. Assignment Sheet #2--Develop Plan for a Care Center
  3. Assignment Sheet #3--Plan and Carry Out Activity for Care Center Residents
- E. Answer to assignment sheets
- F. Test
- G. Answers to test

SUGGESTED ACTIVITIES

III. Unit references

A. Ebersole, Priscilla, and Patricia Hess. *Toward Healthy Aging.* St.Louis: The C.V. Mosley Company, 1981.

B. Forbes, Elizabeth Jane, and Virginia Macken Fitzsimons. *The Older Adult: A Process for Wellness.* St. Louis: The C.V. Mosby Company, 1981.

C. Moss, Frank E., and Val J. Halamandaris. *Too Old, Too Sick, Too Bad.* Germantown, Maryland: Aspen Systems Corporation, 1977.

D. Robinson, Jean, ed. *Helping Geriatric Patients.* Springhouse, Pennsylvania: Nursing82 Books, Intermed Communications, Inc., 1982.

CARE OF THE OLDER ADULT
UNIT VII

INFORMATION SHEET

I. Terms and definitions

   A. Aphasia--Disturbance in or loss of the ability to express oneself verbally or to comprehend speech

   B. Disengagement--Withdrawal of an individual from personal ties, obligations, occupation, or other aspects of life

   C. Expressive or motor aphasia--Inability to say words or to express ideas, although able to understand what is said

   D. Geriatrics--Branch of medicine concerned with aging and its diseases

   E. Gerontology--Branch of scientific study dealing with aging and the problems of the aged

   F. Integrity--Soundness, honesty, and sincerity; being complete

   G. Loyalty--Personal commitment to and careful observance of duty or obligations

   H. Maturity--Ability to show judgment, maintain self-control, accept success or failure, and settle problems

   I. Patience--Capacity for enduring that which is disagreeable, difficult, or prolonged

   J. Reality orientation--Term given to a technique used as an intervention to make a person aware of time, place, and person

      EXAMPLE: "Good morning, Mr. Thompson. It is 9:30 A.M. and Thursday, time for physical therapy."

   K. Receptive or sensory aphasia--Inability to comprehend the meaning of words and to use words correctly when speaking

   L. Rehabilitation--Restoration of ill or injured person to self-sufficiency at his or her highest attainable level in the shortest amount of time

   M. Remotivation--Term used to describe methods of stimulating persons to learn or interact

   N. Responsibility--Ability to accept one's obligations and to be accountable for one's actions

   O. Tolerance--Acceptance of beliefs or practices differing from one's own

INFORMATION SHEET

II. Reasons for studying older adults

A. To provide understanding and care for the rapidly increasing population of people over sixty-five

B. To prevent and cure diseases that in the past have caused death at a younger age

C. To maintain the popular trend of staying healthy through a balanced diet combined with a regimen of exercise

D. To allow a place for this age group in our society and to be concerned with the quality of the older adult's life

E. To prepare and to educate the population to be older adults

III. Erikson's developmental stage of "integrity versus despair"

(NOTE: It is hoped that before adults reach the stage of "integrity versus despair," they have mastered the stage of "generativity versus stagnation," emphasizing the satisfaction of accomplishing work and fulfilling dreams as opposed to being bored and inactive.)

A. Adults between the approximate ages of sixty-five and one hundred evaluate the meaning of their lives

B. Integrity develops if a person accepts past accomplishments and failures honestly

C. Despair occurs if a person is unable to resolve that period of time with acceptance, if person looks back and finds a life without meaning

IV. Major concerns of the older adult

A. Social segregation and isolation of old and ill

B. Separation from family; physical isolation

(NOTE: Separation and isolation may be caused by lack of transportation and geographical mobility.)

C. Disdain for old age shown by youth-oriented society

D. Decrease in income

(NOTE: Most older adults can expect to live on less than half of the income they made when young.)

E. Increase in medical expenses and decrease in third-party payments

EXAMPLES: Medicare, Medicaid

INFORMATION SHEET

V. Common fears of the older adult

  A. Being poor and a burden

    1. Inability to pay for the cost of care in later years

       EXAMPLE: Many older adults have to sell their homes or belongings, use their savings, or borrow to pay for the care they need.

    2. Having to move in with a family member

  B. Change and uncertainty

    1. Resisting change and rigidity of beliefs are endemic in the older adult

    2. Moving into new environments and the shock of leaving loved ones and living with strangers can produce trauma

  C. Being old and ill

    1. Fearing body changes that bring on chronic, debilitating conditions

    2. Fearing illnesses or injuries that leave individuals helpless and unable to care for themselves

  D. Losing one's identity and human dignity

    1. Becoming just one of the mass, a number instead of a name

    2. Losing privacy by being grouped in homes with semiprivate living quarters

  E. Poor care and abuse

     (NOTE: It has been found through research that fear of death is not a primary fear for the older adult. However, the manner of dying is a great fear, and some older adults have been known to commit suicide rather than enter a home or hospital.)

    1. Hearing stories about nursing home residents being abused

    2. Viewing nursing homes and extended care facilities as places to be sent to die

  F. Loss of mate and friends

    1. Fearing being alone after mate and/or friends begin to die

    2. Losing the will to live after loss of mate and/or friends

INFORMATION SHEET

G. Increase in crime rate related to the older adult

1. Involvement in schemes designed by con men and women to swindle older adult's money

2. Withdrawing from society because of fear of violent crimes such as rape, robbery, and murder

VI. Goals of reality orientation

(NOTE: Reality orientation is something nurses do every day for patients even though the nurse may not be aware of it. Even casual conversation can be a method for reorienting someone who is out of touch with reality for whatever reason. The patient who has been ill for several days may not know what day it is or where he or she is.)

A. To reduce person's physical and mental regression, confusion, and disorientation

B. To maintain whatever level of awareness the person has

C. To improve socialization

D. To restore reality as much as possible

E. To restore the person to the maximum level of independence

VII. Ways to carry out reality orientation in a care center and in the community

A. Care centers

1. Offering classes in reality orientation to caregivers so that they will be prepared to carry out reality orientation for all residents

2. Maintaining reality orientation therapy by providing residents with classes and qualified instructors

3. Using all appropriate audiovisuals to assist in orienting residents

EXAMPLES: Calenders, clocks, posters, bulletin board pictures, holiday table or tray napkins, name cards

4. Involving families, friends, and community groups in learning techniques of maintaining reality for residents

INFORMATION SHEET

B. Community

(NOTE: Older adults who are able, both financially and physically, to live independently at home still need reality orientation at times. Home health aides, county health department caregivers, community groups, neighbors, and family members can all help in the maintenance of reality for older adults.)

1. Making sure that older adult is aware of time and place of events taking place in the outside world.

   EXAMPLES: Families, friends, and neighbors sharing calendars, newspapers, magazines with older adult; making phone calls each day to reinforce reality; making sure clocks are working correctly

2. Making the older adult's environment secure and real

   EXAMPLES: Radios and television that work, and telephone to make daily contact with outside available

VIII. Remotivation techniques

(NOTE: Remotivation techniques used in extended care facilities and with patients in nursing homes have been very beneficial in drawing out patients who are withdrawn and may have lost interest in life.

A. Establishing a warm, friendly atmosphere

B. Limiting group size to twelve patients for a small, intimate gathering

C. Reading poetry, novels, and current events articles

D. Conversing about past, present, or future events but avoiding any highly controversial or emotional material

E. Expressing appreciation of the world of work, past or present, which may lead to the development of new skills

F. Establishing an overall atmosphere of friendship and learning

INFORMATION SHEET

IX. Changes in body systems that commonly occur in the older adult and their related problems, treatment, and preventive measures

SYSTEM	CHANGES	PROBLEMS	TREATMENT	PREVENTIVE MEASURES
Integumentary	Decrease in skin turgor; secretions from sweat and oil glands decrease; brown pigmentation occurs; texture of hair is dry; hair may begin to thin; hair begins to gray; skin loses elasticity; body fat decreases, causing bones to become prominent; nail growth slows, but nails may become hard and brittle; sensitivity to temperature decreases; impaired activity may cause skin to break down over bony areas	Breakdown of skin; injuries to skin that do not heal rapidly; low resistance to infections; dry, itchy, scaly skin; loss of hair not related to heredity	Early recognition of any skin breakdown and immediate treatment; reduction of any pressure on bony prominence areas; application of lubricants to dry areas; bed cradles to keep linens from rubbing sensitive areas; special mattresses for bedfast persons; gentle massage over bony areas; frequent change of position	Observe for skin breaks, dry, red, or scaling areas; assess need for daily bathing, and use soaps as appropriate for skin types; use soft washcloth and towels, and avoid any excess friction or pressure when bathing; provide accessory equipment to alleviate pressure on skin or bony prominences (NOTE: It is important to make sure that patient is dried thoroughly after a bath.)
Urinary	Decrease in cardiac output and vascular changes reduce blood flow to kidneys; general size and weight of kidneys decrease; less efficient filtration of nephrons of kidneys	Nocturia; bacteria in urinary tract without early clinical signs and symptoms showing	Offer bedpan or urinal frequently or assist to bathroom; observe and treat any urinary infections as soon as possible	If nocturia is a real problem, suggest that fluids be reduced in the evenings; if urinary tract infections occur frequently, appropriate medications may be used to prevent recurrence; observe for any early symptoms of infection

INFORMATION SHEET

SYSTEM	CHANGES	PROBLEMS	TREATMENT	PREVENTIVE MEASURES
Cardiovascular	Cardiac strength and volume decrease; fat is deposited around heart; valves thicken and sclerose; elastic fibers of arteries fray or split, causing weakening of arterial walls; blood pressure may increase; gradual degeneration of system	Peripheral varicosities; arteriosclerosis; atherosclerosis; hypertension; arrhythmias	Early diagnosis; treatment regimen with appropriate medications, diet, and exercise	Encourage a healthy diet limited in fats and cholesterol; plan an exercise regimen that will promote good circulation; use of antiembolism hose
Nervous	Progressive loss of nerve cells affects mental abilities; all senses gradually decrease; reflex action and temperature regulation ability lessens; sensitivity to pain decreases	Loss of memory; short attention span; stress when overstimulated	Reduce stress by not overloading with stimuli; reduce high levels of drugs that work on central nervous system; use reality orientation when needed	Encourage mental stimulation without overload
Respiratory	Functional capacity, size and structure decline; vital capacity decreases while residual volume increases	Resistance to respiratory conditions decreases; lack of oxygen to other body systems may cause secondary conditions; mental confusion	Symptoms of respiratory infections should be treated immediately	Encourage breathing exercises to promote full capacity of lungs; reduce exposure to persons with respiratory infections
Reproductive	Generalized atrophy of reproductive organs; decrease in amount of hormones released; decrease in amount of secretions to lubricate vagina; prostate gland thickens and becomes fibrous	Reduction of hormones may cause outward symptoms of fatigue, weight loss, decrease in libido; males may have conditions caused from prostatic changes; negative psychological responses due to lack of sexual activity and sexual expression	Assessment of system including need to discuss sexual activities and problems; hormone therapy if indicated	Be ready to discuss problems related to sexuality and encourage expression of needs

INFORMATION SHEET

SYSTEM	CHANGES	PROBLEMS	TREATMENT	PREVENTIVE MEASURES
Musculo-skeletal	Bones become porous, lose density; ligaments and joints stiffen and lose mobility; loss of strength and agility	Fractures may occur spontaneously or due to trauma; contractures of muscles limit movement; stiffening and swelling of joints cause pain and deformities (NOTE: Females are prone to osteoporosis, a condition that causes a decrease in bone mass.)	Calcium replacement to treat osteoporosis; exposure to vitamin D rich sunlight; exercise regimen to prevent contractures and joint stiffness	Encourage a well-balanced diet high in calcium and phosphorous-rich foods; exercise plan based on patients's condition (NOTE: Bedfast patients need passive and active range of motion exercises.)
Gastro-intestinal	Gastric secretions and enzymes as well as absorption of nutrients decrease; loss of muscle tone due to decreased physical activity; loss of teeth; decreased sensitivity of taste buds	Inadequate intake of food and fluids; loss of teeth, causing inability to chew; constipation; gastritis due to imbalance in enzyme action and gastric acid affecting cell lining of stomach; reduction in appetite; malnutrition	Adjustment of diet; smaller amounts of food taken at more frequent intervals; more muscle activity; repair or replacement of teeth for better chewing	Encourage healthy diet; reeducate to importance of types of food for maintenance of body; encourage exercise; discourage laxatives and enemas
Sensory	Hearing loss, vision impairment, aphasia; sense of touch and ability to perceive temperature decrease; loss of peripheral vision and depth perception	Difficulty in communication; burns or frostbite occur easily; accidents due to hearing or vision loss; susceptibility to cold	Early diagnosis of vision or hearing loss and use of glasses, contacts, or hearing aids	Encourage periodical checkups; observe for early symptoms of loss and treat; cover skin to prevent frostbite **(CAUTION: DO NOT use heating pad or hot water bottle directly on skin.)**

INFORMATION SHEET

X. Methods of assisting the older adult to achieve wellness

   A. Encourage patient to stay healthy and have annual checkups

   B. Provide educational opportunities so that patient may learn to maintain health

      EXAMPLES: Classes on diet, exercise, immunizations needed, human sexuality, safety

   C. Assess for signs or symptoms of physical or psychological illness, and encourage patient to seek early treatment

   D. Assist in any rehabilitation program for those older patients who have a chronic condition

   E. Encourage patient to participate in any health assessment program and to utilize agencies set up to give assistance to this age group

      EXAMPLES: Screenings by various groups for glaucoma, hypertension, diabetes

XI. Guidelines in assisting the older adult in dealing with emotional and mental problems

   A. Identify any underlying physical problems to see if they have precipitated emotional or mental problems

   B. Check patient's medications for accuracy of dosage and compatibility

   C. Obtain information from patient, friends, or family about former lifestyle and history of emotional or mental problems

   D. Obtain any assistance from support groups that may be needed in the treatment of conditions

   E. Offer encouragement and support, and build an open line of communication between you and the patient

XII. Common support agencies or groups that assist in maintaining independent status of older adult

   (NOTE: The nurse can assist the older adult by acting as a resource person or by contacting one of the following support agencies or groups.)

   A. Meals-on-wheels groups

   B. Home health care aides

   C. County health department visiting nurses

   D. Senior citizens groups

INFORMATION SHEET

XII. Ways to assist the older adult in hygiene needs

A. Skin care

1. Clean face, hands, axilla, and genital area daily

(NOTE: Most older adults do not need a full bath each day. The skin may break down further if mechanical cleansing or a drying soap is used for cleansing.)

2. Use an oil-based product in bath water to help lubricate dry, scaling skin

B. Mouth and teeth

1. Assist patient in cleaning teeth or dentures, and inspect mouth and gums routinely

2. Prevent sordes by increasing patient's fluid intake and lubricating mouth and lips

(NOTE: Sordes is a thick brownish crust that forms inside the mouth due to thickened saliva caused from a decrease in fluid intake, dentures, or drugs that dry the mouth.)

3. Encourage patient to wear his or her dentures and to seek assistance if appliance is ill fitting

C. Nail, foot, and leg care

1. Assist in weekly manicures and pedicures as needed

2. Check shoes and stockings for proper fit

3. Immediately care for injuries, corns, and callouses

4. Encourage comfortable shoe styles that accommodate changes in foot contour

D. Hair

1. Assist patient in brushing and combing hair daily and shampooing when needed

2. Encourage styles that are easy to care for and flattering to the face

E. Perineal/genital care

1. Provide a time for cleansing of the perineal/genital areas during daily bathing

2. Assess and treat any vaginal discharges that may be caused from a Monilia infection common to women of this age group

INFORMATION SHEET

XIV. Ways to protect the older adult from common hazards

- A. Falls
  - 1. Clear all obstacles and furniture from walking path, and do not change furniture around frequently
  - 2. Do not use scatter rugs on slippery floors
  - 3. Wipe up any spills from floor immediately
  - 4. Assist in use of walking devices when needed

    EXAMPLES: Cane, walker, crutches
  - 5. Make sure that there is adequate light for patient to see clearly when moving about
- B. Burns
  - 1. When bathing older adult, test water before using because their skin is very fragile and sensitivity to temperatures has decreased
  - 2. Remind older adult living at home to be careful in using heating pads, stoves, or hot water
- C. Drug overdose
  - 1. Make sure that patient in nursing home takes his or her medication and does not hoard dosages
  - 2. Help the older adult living at home to organize his or her medication schedule; and make sure that correct medication, correct amount, and correct time for taking is clearly written down
  - 3. Know the medications you give and any incompatibilities

XV. Advantages and disadvantages of types of living facilities available for the older adult (Assignment Sheets #1-#3)

- A. Own home
  - 1. Advantages
    - a. Provides privacy
    - b. Maintains dignity and self-esteem
    - c. Permits personal control of life
    - d. Provides comfort of familiar surroundings

INFORMATION SHEET

   2. Disadvantages
      a. May be too large or too expensive to maintain
      b. May be unsafe

B. Home of relatives
   1. Advantages
      a. Usually less expensive
      b. Allows for some privacy
      c. Permits a feeling of belonging
      d. Preserves a closer contact with family and friends
   2. Disadvantages
      a. May cause discord between generations
      b. May result in lack of space for family in small home
      c. Causes undue hardship on remainder of family if person is disabled or illness is severe

C. Extended care facility
   1. Advantages
      a. Provides care necessary in acute conditions
      b. Provides expensive or special equipment when needed
   2. Disadvantages
      a. Expensive
      b. Separates patient from family and friends
      c. Encourages dependency
      d. May provide impersonal care

D. Retirement home
   1. Advantages
      a. Provides many services which the person is no longer able to do alone

INFORMATION SHEET

   b. Permits privacy and freedom of activity

   c. Encourages association with peers

   d. Provides most homelike of institutional settings

   e. Able to provide nursing care if needed

  2. Disadvantages

   a. Usually expensive and can be utilized only by persons with financial means

   b. Provides limited contact with persons of other age groups

   c. May isolate individual from family and friends

E. Nursing homes

  1. Advantages

   a. Provides care for persons who need physical assistance

   b. Provides security through a routine of responsible care and a structured atmosphere

   c. Usually less expensive than a retirement home

   d. May provide services such as rehabilitation and occupational therapy programs

   e. Provides companionship and more homelike atmosphere than extended care facility

  2. Disadvantages

   a. May not provide more than custodial care

   b. Separates individual from family and friends

   c. May cause loss of identity and privacy

   d. May increase confusion or disorientation due to enforced inactivity and/or lack of personal attention

   e. May cause lack of freedom of choice

INFORMATION SHEET

XVI. Personal qualities needed by persons who provide care specifically for the older adult

A. Patience--To work slowly with patient who takes a little longer in performing routine tasks

B. Tolerance--To understand that each person has the right to be different; not to be judgmental of person who has a different lifestyle

C. Responsibility--To be there when needed

(NOTE: Older adults rely on one person many times and are dependent upon that one person.)

D. Warmth and love--To be able to hug and touch when it is needed; to sit down and listen when patient needs to talk

E. Resourcefulness--To assess patient's needs and to approach new methods for giving care

XVII. Basic facts concerning human sexuality in the older adult

A. Regular sexual activity helps maintain the physical health and response of the genital organs

B. Masturbation is a normal outlet for release of sexual tension when sexual partners are no longer available

C. Sexual interest is alive and active even though organ growth and action has decreased to some degree

D. Sexual intercourse is not the only form of sexual expression needed by the older adult; touching, holding, and communicating with words of warmth and love are also important

CARE OF THE OLDER ADULT
UNIT VII

ASSIGNMENT SHEET #1--ANALYZE LIFESTYLES OF OLDER ADULTS LIVING INDEPENDENTLY AND OLDER ADULTS LIVING IN A CARE FACILITY

NAME ______________________________ SCORE __________

Lifestyles for older adults living independently and those living in care centers differ a great deal. Many older adults are comfortable and quite happy living in a center where they are given round-the-clock care, whereas others are determined to live out their lives doing for themselves as much as possible.

To complete this assignment sheet, you will need to interview two older adults, one living in a care center and one living independently. Develop a questionnaire that will cover basic information about their personal backgrounds and their medical histories. Ask questions relative to their lifestyles and why they chose to remain independent or to live in a care center. Their answers may surprise you. Hand assignment sheet in to instructor for evaluation, or discuss in class.

#1 INDEPENDENT LIFESTYLE

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ASSIGNMENT SHEET #1

ASSIGNMENT SHEET #1

#2 LIFESTYLE IN A CARE CENTER

ASSIGNMENT SHEET #1

CARE OF THE OLDER ADULT
UNIT VII

ASSIGNMENT SHEET #2--DEVELOP PLAN FOR A CARE CENTER

NAME ____________________________ SCORE ______________

"If only I could plan my own care center." How many times have we said that or heard one of our friends make that statement. What could we plan that would make the lifestyle of that valued older person unique and worthwhile? How could we make the last years of another's life meaningful? What actions and activities could we develop that would keep that person healthy, active, and more "alive"?

To complete this assignment sheet, you will need to do some research on nursing homes and care centers. Your instructor will provide references to read to give you some good ideas on developing your plan. You will also need to visit nursing homes or centers to compare types of activities and care provided. Decide on floor plan, types of care to be given, activities in which residents can be involved, and specific goals you have for your care center. You may decide to use the care center where you are doing your clinical work and improve upon its design and activities of care. Discuss your plan in class.

A. Draw a simple floor plan of your care center (new or redesigned).

ASSIGNMENT SHEET #2

B. List types of caregivers you want to involve.

EXAMPLES: Nurses, physical therapists

C. List activities you want to provide for residents.

EXAMPLES: Remotivation sessions, style shows, visits of children or pets

ASSIGNMENT SHEET #2

D. List specific goals for your proposed care center.

E. List added or implemented safety measures.

CARE OF THE OLDER ADULT
UNIT VII

ASSIGNMENT SHEET #3--PLAN AND CARRY OUT ACTIVITY FOR CARE CENTER RESIDENTS

NAME______________________________ SCORE ______________

For many residents in care centers, the only activity they have to look forward to is mealtime. How wonderful it would be to have something special to look forward to such as a style show, a picnic, visits from pets and children, a special luncheon, a game day with prizes, or any fun activity or cultural event.

With guidance from your instructor, work together in small groups to plan and carry out an activity. Use this sheet as an outline for your planning. Carry out the activity and evaluate your activity by the residents' reactions. It will be thoroughly enjoyable for you as well.

A. Activity and date

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B. Resource persons

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C. Supplies needed

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ASSIGNMENT SHEET #3

D. Responsibilities of each group member

ASSIGNMENT SHEET #3

E. Evaluation of activity

CARE OF THE OLDER ADULT
UNIT VII

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

Assignment Sheet #2--Evaluated to the satisfaction of the instructor

Assignment Sheet #3--Evaluated to the satisfaction of the instructor

CARE OF THE OLDER ADULT
UNIT VII

TEST

NAME ______________________________ SCORE ____________

1. Match terms associated with the care of the older adult to their correct definitions. Write the correct numbers in the blanks. Definitions are continued on the next page.

______ a. Branch of medicine concerned with aging and its diseases

______ b. Branch of scientific study dealing with aging and the problems of the aged

______ c. Disturbance in or loss of the ability to express oneself verbally or to comprehend speech

______ d. Inability to comprehend the meaning of words and to use words correctly when speaking

______ e. Inability to say words or to express ideas, although able to understand what is said

______ f. Withdrawal of an individual from personal ties, obligations, occupation, or other aspects of life

______ g. Soundness, honesty, and sincerity; being complete

______ h. Personal commitment to and careful observance of duty or obligations

______ i. Ability to accept one's obligations and to be accountable for one's actions

______ j. Acceptance of beliefs or practices differing from one's own

______ k. Capacity for enduring that which is disagreeable, difficult, or prolonged

______ l. Ability to show judgment, maintain self-control, accept success or failure, and settle problems

______ m. Term given to a technique used as an intervention to make a person aware of time, place, and person

1. Reality orientation
2. Aphasia
3. Responsibility
4. Geriatrics
5. Maturity
6. Rehabilitation
7. Gerontology
8. Loyalty
9. Patience
10. Receptive or sensory aphasia
11. Disengagement
12. Expressive or motor aphasia
13. Tolerance
14. Integrity
15. Remotivation

TEST

_____n. Restoration of ill or injured person to self-sufficiency at his or her highest attainable level in the shortest amount of time

_____o. Term used to describe methods of stimulating persons to learn and interact

2. State reasons for studying older adults.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

3. Describe Erikson's developmental stage of "integrity versus despair."

____

4. Select from the following list major concerns of the older adult. Write an "X" in the blank before each correct answer.

_____a. Continuing education

_____b. Increase in medical expenses and decrease in third-party payments

TEST

_____c. Disdain for old age shown by youth-oriented society

_____d. Planning long-term goals

_____e. Social segregation and isolation of old and ill

_____f. Family planning

_____g. Decrease in income

_____h. Separation from family; physical isolation

5. Describe common fears of the older adult.

a. Being poor and a burden--____________________

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b. Change and uncertainty--____________________

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c. Being old and ill--____________________

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d. Losing one's identity and human dignity--____________________

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TEST

e. Poor care and abuse--______________________________

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f. Loss of mate and friends--______________________________

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g. Increase in crime rate related to the older adult--______________________________

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6. Select from the following list goals of reality orientation. Write an "X" in the blank before each correct answer.

_____a. To reduce person's physical and mental regression, confusion, and disorientation

_____b. To maintain whatever level of awareness the person has

_____c. Elevate IQ

_____d. To improve socialization

_____e. Learn new skills

_____f. To restore reality as much as possible

_____g. To restore the person to the maximum level of independence

TEST

7. State ways to carry out reality orientation in a care center and in the community.

a. Care centers

1) ______________________________

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2) ______________________________

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3) ______________________________

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4) ______________________________

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b. Community

1) ______________________________

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2) ______________________________

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TEST

8. Discuss remotivation techniques.

TEST

9. Describe changes in body systems that commonly occur in the older adult and their related problems, treatment, and preventive measures. Write the correct answers in the blanks.

SYSTEM	CHANGES	PROBLEMS	TREATMENT	PREVENTIVE MEASURES
Integumentary	Decrease in skin turgor; secretions from sweat and oil glands decrease; brown pigmentation occurs; texture of hair is dry; hair may begin to thin; hair begins to gray; skin loses elasticity; body fat decreases, causing bones to become prominent; nail growth slows, but nails may become hard and brittle; sensitivity to temperature decreases; impaired activity may cause skin to break down over bony areas	a.____________________	Early recognition of any skin breakdown and immediate treatment; reduction of any pressure on bony prominence areas; application of lubricants to dry areas; bed cradles to keep linens from rubbing sensitive areas; special mattresses for bedfast persons; gentle massage over bony areas; frequent change of position	Observe for skin breaks, dry, red, or scaling areas; assess need for daily bathing, and use soaps as appropriate for skin types; use soft washcloth and towels, and avoid any excess friction or pressure when bathing; provide accessory equipment to alleviate pressure on skin or bony prominences
Urinary	Decrease in cardiac output and vascular changes reduce blood flow to kidneys; general size and weight of kidneys decrease; less efficient filtration of nephrons of kidneys	Nocturia; bacteria in urinary tract without early clinical signs and symptoms showing	b.____________________	If nocturia is a real problem, suggest that fluids be reduced in the evenings; if urinary tract infections occur frequently, appropriate medications may be used to prevent recurrence; observe for any early symptoms of infection

TEST

SYSTEM	CHANGES	PROBLEMS	TREATMENT	PREVENTIVE MEASURES
Cardiovascular	c.______________	Peripheral varicosities; arteriosclerosis; atherosclerosis; hypertension; arrhythmias	Early diagnosis; treatment regimen with appropriate medications, diet, and exercise	Encourage a healthy diet limited in fats and cholesterol; plan an exercise regimen that will promote good circulation; use of antiembolism hose
Nervous	Progressive loss of nerve cells affects mental abilities; all senses gradually decrease; reflex action and temperature regulation ability lessens; sensitivity to pain decreases	d.______________	Reduce stress by not overloading with stimuli; reduce high levels of drugs that work on central nervous system; use reality orientation when needed	Encourage mental stimulation without overload
Respiratory	Functional capacity, size and structure decline; vital capacity decreases while residual volume increases	Resistance to respiratory conditions decreases; lack of oxygen to other body systems may cause secondary conditions; mental confusion	Symptoms of respiratory infections should be treated immediately	e.______________
Reproductive	Generalized atrophy of reproductive organs; decrease in amount of hormones released; decrease in amount of secretions to lubricate vagina; prostate gland thickens and becomes fibrous	f.______________	Assessment of system including need to discuss sexual activities and problems; hormone therapy if indicated	Be ready to discuss problems related to sexuality and encourage expression of needs

TEST

SYSTEM	CHANGES	PROBLEMS	TREATMENT	PREVENTIVE MEASURES
Musculo-skeletal	Bones become porous, lose density; ligaments and joints stiffen and lose mobility; loss of strength and agility	Fractures may occur spontaneously or due to trauma; contractures of muscles limit movement; stiffening and swelling of joints cause pain and deformities	g.________________ ________________ ________________ ________________ ________________ ________________	Encourage a well-balanced diet high in calcium and phosphorous-rich foods; exercise plan based on patients's condition
Gastro-intestinal	h.________________ ________________ ________________ ________________ ________________ ________________ ________________ ________________	Inadequate intake of food and fluids; loss of teeth, causing inability to chew; constipation; gastritis due to imbalance in enzyme action and gastric acid affecting cell lining of stomach; reduction in appetite; malnutrition	Adjustment of diet; smaller amounts of food taken at more frequent intervals; more muscle activity; repair or replacement of teeth for better chewing	Encourage healthy diet; reeducate to importance of types of food for maintenance of body; encourage exercise; discourage laxatives and enemas
Sensory	Hearing loss, vision impairment, aphasia; sense of touch and ability to perceive temperature decrease; loss of peripheral vision and depth perception	i.________________ ________________ ________________ ________________ ________________	Early diagnosis of vision or hearing loss and use of glasses, contacts, or hearing aids	Encourage periodical check-ups; observe for early symptoms of loss and treat; cover skin to prevent frostbite

TEST

10. Select from the following list methods of assisting the older adult to achieve wellness. Write an "X" in the blank before each correct answer.

______a. Encourage patient to stay healthy and have annual checkups

______b. Recommend use of laxatives to prevent any problems of constipation and impaction

______c. Encourage use of over-the-counter drugs for minor illness

______d. Provide educational opportunities so that patient may learn to maintain health

______e. Assess for signs or symptoms of physical or psychological illness, and encourage patient to seek early treatment

______f. Encourage patient to have weekly appointments with a psychological counselor

______g. Assist in any rehabilitation program for those older patients who have a chronic condition

______h. Encourage the use of oral doses of over-the-counter supplemental vitamins and minerals

______i. Encourage patient to participate in any health assessment program and to utilize agencies set up to give assistance to this age group

11. State guidelines in assisting the older adult in dealing with emotional and mental problems.

a. ______________________________

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b. ______________________________

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c. ______________________________

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d. ______________________________

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e. ______________________________

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TEST

12. List common support agencies or groups that assist in maintaining independent status of the older adult.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

13. Describe ways to assist the older adult in hygiene needs.

a. Skin care--____________________

b. Mouth and teeth--____________________

c. Nail, foot, and leg care--____________________

TEST

d. Hair-- ____________________

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e. Perineal/genital care-- ____________________

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14. Describe ways to protect the older adult from common hazards.

a. Falls

1) ____________________

2) ____________________

3) ____________________

4) ____________________

5) ____________________

b. Burns

1) ____________________

2) ____________________

c. Drug overdose

1) ____________________

2) ____________________

3) ____________________

TEST

15. Select from the following list advantages and disadvantages of types of living facilities available for the older adult. Write an "X" in the blank before each correct answer.

a. Own home

1) Advantages

_____a) Provides privacy

_____b) Provides for personal security

_____c) Maintains dignity and self-esteem

_____d) Permits personal control of life

_____e) Promotes dependency

_____f) Provides comfort of familiar surroundings

2) Disadvantages

_____a) Less isolated than extended care center

_____b) May be too large or too expensive to maintain

_____c) May be unsafe

b. Home of relatives

1) Advantages

_____a) Usually less expensive

_____b) Allows for some privacy

_____c) Allows for sharing of all personal property

_____d) Permits a feeling of belonging

_____e) Provides constant supervision

_____f) Preserves a closer contact with family and friends

2) Disadvantages

_____a) Promotes independence

_____b) May cause discord between generations

_____c) Provides a constant social environment

_____d) May result in lack of space for family in small home

_____e) Causes undue hardship on remainder of family if person is disabled or illness is severe

TEST

c. Extended care facility

1) Advantages

______a) Provides for family to be together at all times

______b) Provides care necessary in acute conditions

______c) Encourages independent living in small cottages or homes

______d) Provides expensive or special equipment when needed

2) Disadvantages

______a) Expensive

______b) Separates patient from family and friends

______c) Is less expensive than nursing home or retirement center

______d) Encourages dependency

______e) Provides only semiskilled personnel

______f) May provide impersonal care

d. Retirement home

1) Advantages

______a) Relatively expensive in comparison to hospital care

______b) Provides many services which the person is no longer able to do alone

______c) Permits privacy and freedom of activity

______d) Encourages association with peers

______e) Takes away independence

______f) Provides most homelike of institutional settings

______g) Able to provide nursing care if needed

2) Disadvantages

______a) Usually expensive and can be utilized only by persons with financial means

______b) Nursing care is limited to unlicensed personnel

TEST

______c) Must relinquish all personal items

______d) Provides limited contact with persons of other age groups

______e) May isolate individual from family and friends

e. Nursing homes

1) Advantages

______a) Provides care for persons who need physical assistance

______b) Provides security through a routine of responsible care and a structured atmosphere

______c) Provides for close contact of family

______d) Usually is less expensive than a retirement home

______e) May provide services such as rehabilitation and occupational therapy programs

______f) Provides association with only those of the same age group

______g) Provides companionship and a more homelike atmosphere than extended care facility

2) Disadvantages

______a) Third-party payments will not pay for any part of care

______b) May not provide more than custodial care

______c) May cause feelings of aloneness

______d) Separates individual from family and friends

______e) May cause loss of identity and privacy

______f) May increase confusion or disorientation due to enforced inactivity and/or lack of personal attention

______g) May cause lack of freedom of choice

16. Describe personal qualities needed by persons who provide care specifically for the older adult.

____

____

____

TEST

____

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____

17. Select from the following list basic facts concerning human sexuality in the older adult. Write an "X" in the blank before each correct answer.

_____a. Regular sexual activity helps maintain the physical health and response of the genital organs

_____b. Older adults no longer have sexual needs

_____c. Masturbation is a normal outlet for release of sexual tension when sexual partners are no longer available

_____d. Sexual interest is alive and active even though organ growth and action have decreased to some degree

_____e. Human sexuality counseling should be given to every older adult

_____f. Sexual intercourse is not the only form of sexual expression needed by the older adult; touching, holding, and communicating with words of warmth and love are also important

(NOTE: Test questions 18-20 list the assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

18. Analyze lifestyles of older adults living independently and older adults living in a care facility.

19. Develop plan for a care center.

20. Plan and carry out activity for care center residents.

CARE OF THE OLDER ADULT
UNIT VII

ANSWERS TO TEST

1. a. 4
   b. 7
   c. 2
   d. 10
   e. 12
   f. 11
   g. 14
   h. 8
   i. 3
   j. 13
   k. 9
   l. 5
   m. 1
   n. 6
   o. 15

2. Answer should include the following

   a. To provide understanding and care for the rapidly increasing population of people over sixty-five

   b. To prevent and cure diseases that in the past have caused death at a younger age

   c. To maintain the popular trend of staying healthy through a balanced diet combined with a regimen of exercise

   d. To allow a place for this age group in our society and to be concerned with the quality of the older adult's life

   e. To prepare and to educate the population to be older adults

3. Description should include the following

   a. Adults between the approximate ages of sixty-five and one hundred evaluate the meaning of their lives

   b. Integrity develops if a person accepts past accomplishments and failures honestly

   c. Despair occurs if a person is unable to resolve that period of time with acceptance, if person looks back and finds a life without meaning

4. b, c, e, g, h

5. Description should include the following

   a. Being poor and a burden

      1) Inability to pay for the cost of care in later years

      2) Having to move in with a family member

ANSWERS TO TEST

b. Change and uncertainty

    1) Resisting change and rigidity of beliefs are endemic in the older adult

    2) Moving into new environments and the shock of leaving loved ones and living with strangers can produce trauma

c. Being old and ill

    1) Fearing body changes that bring on chronic, debilitating conditions

    2) Fearing illnesses or injuries that leave individuals helpless and unable to care for themselves

d. Losing one's identity and human dignity

    1) Becoming just one of the mass, a number instead of a name

    2) Losing privacy by being grouped in homes with semiprivate living quarters

e. Poor care and ab[illegible]

    1) Hearing stories about nursing home residents being abused

    2) Viewing nursing homes and extended care facilities as places to be sent to die

f. Loss of mate and friends

    1) Fearing being alone after mate and/or friends begin to die

    2) Losing the will to live after loss of mate and/or friends

g. Increase in crime rate related to the older adult

    1) Involvement in schemes designed by con men and women to swindle older adult's money

    2) Withdrawing from society because of fear of violent crime such as rape, robbery, and murder

6. a, b, d, f, g

7. a. Care centers

    1) Offering classes in reality orientation to caregivers so that they will be prepared to carry out reality orientation for all residents

    2) Maintaining reality orientation therapy by providing residents with classes and qualified instructors

    3) Using all appropriate audiovisuals to assist in reorienting residents

ANSWERS TO TEST

   4) Involving families, friends, and community groups in learning techniques of maintaining reality for residents

  b. Community

   1) Making sure that older adult is aware of time and place of events taking place in the outside world

   2) Making the older adult's environment secure and real

8. Discussion should include the following

   a. Establishing warm, friendly atmosphere

   b. Limiting group size to twelve patients for a small, intimate gathering

   c. Reading poetry, novels, and current events articles

   d. Conversing about past, present, or future events but avoiding any highly controversial or emotional material

   e. Expressing appreciation of the world of work, past or present, which may lead to the development of new skills

   f. Establishing an overall atmosphere of friendship and learning

9. a. Breakdown of skin; injuries to skin that do not heal rapidly; low resistance to infections; dry, itchy, scaly skin; loss of hair not related to heredity

   b. Offer bedpan or urinal frequently or assist to bathroom; observe and treat any urinary infections as soon as possible

   c. Cardiac strength and volume decrease; fat is deposited around heart; valves thicken and sclerose; elastic fibers of arteries fray or split, causing weakening of arterial walls; blood pressure may increase; gradual degeneration of system

   d. Loss of memory; short attention span; stress when overstimulated

   e. Encourage breathing exercises to promote full capacity of lungs; reduce exposure to persons with respiratory infections

   f. Reduction of hormones may cause outward symptoms of fatigue, weight loss, decrease in libido; males may have conditions caused from prostatic changes; negative psychological responses due to the lack of sexual activity and sexual expression

   g. Calcium replacement to treat osteoporosis; exposure to vitamin D rich sunlight; exercise regimen to prevent contractures and joint stiffness

   h. Gastric secretions and enzymes as well as absorption of nutrients decrease; loss of muscle tone due to decreased physical activity; loss of teeth; decreased sensitivity of taste buds

ANSWERS TO TEST

   i. Difficulty in communication; burns or frostbite occur easily; accidents due to hearing or vision loss; susceptibility to cold

10. a, d, e, g, i

11. Answer should include the following

    a. Identify any underlying physical problems to see if they have precipitated emotional or mental problems

    b. Check patient's medications for accuracy of dosage and compatibility

    c. Obtain information from patient, friends, or family about former lifestyle and history of emotional or mental problems

    d. Obtain any assistance from support groups that may be needed in the treatment of conditions

    e. Offer encouragement and support, and build an open line of communication between you and the patient

12. Answer should include any three of the following

    a. Meals-on-wheels groups

    b. Home health care aides

    c. County health department visiting nurses

    d. Senior citizen groups

13. Description should include the following

    a. Skin care

       1) Clean face, hands, axilla, and genital area daily

       2) Use an oil-based product in bath water to help lubricate dry, scaling skin

    b. Mouth and teeth

       1) Assist patient in cleaning teeth or dentures, and inspect mouth and gums routinely

       2) Prevent sordes by increasing patient's fluid intake and lubricating mouth and lips

       3) Encourage patient to wear his or her dentures and to seek assistance if appliance is ill fitting

ANSWERS TO TEST

c. Nail, foot, and leg care

   1) Assist in weekly manicures and pedicures as needed

   2) Check shoes and stockings for proper fit

   3) Immediate care for injuries, corns, and callouses

   4) Encourage comfortable shoe styles that accommodate changes in foot contour

d. Hair

   1) Assist patient in brushing and combing hair daily and shampooing when needed

   2) Encourage styles that are easy to care for and flattering to the face

e. Perineal/genital care

   1) Provide a time for cleansing of the perineal/genital areas during daily bathing

   2) Assess and treat any vaginal discharges that may be caused from a Monilia infection common to women of this age group

14. Description should include the following

   a. Falls

      1) Clear all obstacles and furniture from walking path, and do not change furniture around frequently

      2) Do not use scatter rugs on slippery floors

      3) Wipe up any spills from floor immediately

      4) Assist in use of walking devices when needed

      5) Make sure that there is adequate light for patient to see clearly when moving about

   b. Burns

      1) When bathing older adult, test water before using because skin is very fragile and sensitivity to temperatures has decreased

      2) Remind older adult living at home to be careful in using heating pads, hot water bottles, or hot water

ANSWERS TO TEST

c. Drug overdose

1) Make sure that patient in nursing home takes his or her medication and does not hoard dosages

2) Help the older adult living at home to organize his or her medication schedule; and make sure that correct medication, correct amount, and correct time for taking is clearly written down

3) Know the medications you give and any incompatibilities

15. a. 1) a, c, d, f
    2) b, c

    b. 1) a, b, d, f
    2) b, d, e

    c. 1) b, d
    2) a, b, d, f

    d. 1) b, c, d, f, g
    2) a, d, e

    e. 1) a, b, d, e, g
    2) b, d, e, f, g

16. Description should include the following

    a. Patience--To work slowly with patient who takes a little longer in performing routine tasks

    b. Tolerance--To understand that each person has the right to be different; not to be judgmental of person who has a different lifestyle

    c. Responsiblity--To be there when needed

    d. Warmth and love--To be able to hug and touch when it is needed; to sit down and listen when patient needs to talk

    e. Resourcefulness--To assess patient's needs and to approach new methods for giving care_

17. a, c, d, f

18. Evaluated to the satisfaction of the instructor

19. Evaluated to the satisfaction of the instructor

20. Evaluated to the satisfaction of the instructor

INTRODUCTION TO PHARMACOLOGY
UNIT I

UNIT OBJECTIVE

After completing this unit, the student should be able to use knowledge of the forms of drugs, and the legal and ethical implications of drug use in the safe and therapeutic administration of drugs. The student should also be able to use drug reference books, write abbreviations and measurements, and convert equivalent systems needed in drug computations. This knowledge will be shown by completing assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with basic pharmacology to their correct definitions.
2. Match historical events or persons that have contributed to the field of pharmacology to their correct descriptions.
3. List general purposes for which drugs are used.
4. List sources of drugs.
5. Match common classes of drugs to their actions.
6. Distinguish among types of names that a drug may have.
7. Describe the process of drug standardization to guarantee strength and purity of a drug.
8. List common sources of information about drugs.
9. Match laws or agencies that aid in the control of drugs to their correct descriptions.
10. State principles related to the nurse's accountability in the administration of medications.
11. Select from a list restrictions that the nurse should consider in the control of narcotics and other medications.
12. State legal and ethical responsibilities of the nurse when administering medication.
13. Select from a list facts about self-prescribed medications.
14. Describe guidelines to use in the administration of oral and parenteral medications to infants, children, adolescents, and geriatric patients.
15. Match forms of drugs to their correct descriptions.
16. Distinguish among systems of measurement.

OBJECTIVE SHEET

17. Write apothecaries' symbols of dry weight and liquid volume.
18. Match metric prefixes to their correct values.
19. Distinguish among units used in measuring systems.
20. Write abbreviations used in measuring systems.
21. Write approximate equivalent measures of weight and volume.
22. Convert grams to grains.
23. Convert grains to grams.
24. Convert grams to milligrams.
25. Convert milligrams to grams.
26. Write abbreviations and/or symbols pertaining to administration of medications.
27. Use drug information reference.
28. Practice using household, apothecaries', and metric systems.

INTRODUCTION TO PHARMACOLOGY
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities

A. Order materials planned to supplement unit.

1. Filmstrips

(NOTE: The following filmstrips are available through the Trainex Corporation, P.O. Box 116, Garden Grove, California 92642.)

a. *Drugs: From Research to Your Patient*

b. *The Metric System*

c. *Apothecary Measurements*

d. *Household Measurements*

2. Instructional packages

(NOTE: The following instructional packages are available from The Center for Vocational Education, Ohio State University, 1960 Kenny Road, Columbus, Ohio 43210.)

a. Metrics for licensed practical nursing

b. Metrics for nursing

B. Provide students with objective sheet.

C. Provide students with information and assignment sheets.

(NOTE: It is important to stress to students that some equivalents are only appropriate measurements and that different books may show different amounts.)

D. Discuss unit and specific objectives.

E. Discuss information and assignment sheets.

F. Develop appropriate learning activities for special needs students.

G. Provide a variety of drug information references for use in Assignment Sheet #1.

EXAMPLES: *Hospital Formulary, Facts and Comparisons*

H. Develop learning games to play to reinforce knowledge of systems of measurement.

(NOTE: Flash cards can be used with the entire class or with individuals. Use "Concentration" for abbreviations, and "Bingo" for symbols.)

SUGGESTED ACTIVITIES

I. Give test.

(NOTE: Because the test is comprehensive and long, it may be necessary to administer it in sections. Questions 1-16 could be given first, and Questions 17-22 given at a later time.)

J. Reteach if necessary.

II. Instructional materials

A. Objective sheet

B. Suggested activities

C. Information sheet

D. Assignment sheets

1. Assignment Sheet #1--Use Drug Information Reference

2. Assignment Sheet #2--Practice Using Household, Apothecaries', and Metric Systems

3. Assignment Sheet #3--Convert Grams to Grains, Grains to Grams

4. Assignment Sheet #4--Convert Grams to Milligrams, Milligrams to Grams

E. Answers to assignment sheets

F. Test

G. Answers to test

III. Unit references

A. Sloan, Jamee Reid. *Medical Assistant.* Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1981.

B. Squire, Jessie E., and Bruce D. Clayton. *Basic Pharmacology for Nurses,* 7th ed. St. Louis: The C.V. Mosby Company, 1981.

INTRODUCTION TO PHARMACOLOGY
UNIT I

INFORMATION SHEET

I. Terms and definitions

A. Antibiotic--Chemical compound produced by and obtained from a living organism or cell; able to inhibit or kill other microorganisms

B. Biologic products--Medicinal preparations made from living organisms and their products, including serums, vaccines, antigens, and antitoxins

C. Chemotherapy--Treatment of illness by chemical means (by medication)

D. Dosage--Amount of medicine to be administered to a patient at one time

E. Drug--Medication; chemical or other substance intended to have a therapeutic effect

F. Drug misuse--Use of any substance which affects mood or behavior to the extent that such use causes physical, mental, or social harm

G. Enteric coated--Covered with a substance that resists dissolution in stomach pH and begins to dissolve only when reaching the small intestine

H. Grain--Unit of weight in the apothecaries' system; determined by the average weight of a grain of wheat

I. Gram--Unit of weight in the metric system; weight of one cubic centimeter of water at 4° centigrade

J. Hypodermic or subcutaneous--Beneath the skin

K. Intradermal--Within the skin

L. Intramuscular--Within a muscle

(NOTE: The prefix *intra* means *within.*)

M. Intravenous--Within a vein

N. Liter--Unit of fluid measure; volume occupied by one kilogram of water at 4° centigrade; slightly more than one quart

O. Materia medica--Study of the sources, physical characteristics, composition, preparation, dosage, and effects of the substances used in treating the sick

P. Meter--Unit of linear measurement in the metric system

Q. Milliequivalent--Weight of a substance contained in one milliliter (1 cc) of a normal solution

INFORMATION SHEET

R. Parenteral--Designating any route other than the alimentary canal

S. Pharmacist--Person licensed to practice pharmacy

(NOTE: This person may also be known as an apothecary.)

T. Pharmacology--Study of the actions of drugs on living organisms

U. Pharmacopeia--Book containing a selected list of medicinal preparations and their dosage forms; provides a description and the standards for purity and strength for each drug listed

V. Pharmacy--Profession, or place of preparing and dispensing drugs

W. Prescription--Physician's medication order

X. Systemic effect--Generalized or affecting the entire body

Y. Volatile--Easily vaporized or evaporated

II. Historical events or persons that have contributed to the field of pharmacology

A. Primitive medicine man--Used herbs and vile-tasting concoctions to drive out evil spirits

B. Ebers papyrus--Egyptian scroll written about 1600 B.C.; describes many prescriptions and medicinal formulas

(NOTE: Some drugs described in the Ebers papyrus that are still in use today are castor oil, peppermint, opium, and henbane or hyoscyamus.)

C. Moses--Set forth one of the earliest codes of sanitation

D. Peruvians--Used cinchona, which is similar to quinine, to treat malaria; used coca, from which cocaine is derived, to relieve pain

E. Hindus--Used rauwolfia to calm the restless and treat heart disease

(NOTE: Derivatives of rauwolfia are used as antihypertensives in modern medicine.)

F. Hippocrates--Greek physician of fifth century B.C. who is called the "Father of Medicine"

G. Aesculapius--God of healing in Roman mythology

(NOTE: The staff of Aesculapius is the official insignia of the American Medical Association.)

H. Galen--Greek physician of the second century whose observations and writings influenced medicine for many centuries

(NOTE: Seventy of the six hundred drugs he described are still listed in present pharmacopeias.)

INFORMATION SHEET

I. Arabians--Advanced the science of medicine and pharmacy in the ninth and tenth centuries; compiled the first pharmacopeia

J. First pharmacopeia in Britain--Published in London in 1618; included 1900 remedies; based largely on the works of Galen and the Arabian physicians

K. First national pharmacopeia--*The French Codex* published in 1818

L. First American pharmacopeia--Published in 1820

M. Edward Jenner--English physician who discovered the principle of smallpox vaccine in 1796

N. Louis Pasteur--Developed preventive inoculations for rabies, chicken cholera, and anthrax (1822-1895)

O. Lord Lister--Founder of modern antiseptic surgery in London in the 1860s

P. Madame Curie--Discovered radium in 1893

Q. Wilhelm Roentgen--Discovered the X ray in 1895

R. Banting and Best--First used insulin in treating diabetes in Canada in 1922

S. Sir Alexander Fleming--Discovered penicillin by accident in 1929

(NOTE: Penicillin was first used for humans in Britain in 1941 and in the United States in 1942.)

T. Salk and Sabin--Developed polio vaccines in 1955 and 1961, respectively

III. General purposes for which drugs are used

A. Diagnosis

EXAMPLES: Barium sulfate used in taking X rays of gastrointestinal tract
Dyes used to x-ray internal organs
Ferric chloride test for phenylketonuria

B. Treatment of symptoms

EXAMPLES: Analgesics to relieve pain
Antipyretics to decrease temperature
Local anesthetics to relieve or prevent pain

C. Treatment of diseases or dysfunctions

EXAMPLES: Antibiotics taken internally for specific infections
Topical ointments for dermatitis
Hormone therapy such as insulin for diabetes mellitus

INFORMATION SHEET

D. Prevention of disease

EXAMPLES: Vaccines such as smallpox or polio
Serums such as gamma globulin
Antitoxins such as diphtheria or tetanus

IV. Sources of drugs

A. Animal

EXAMPLES: Thyroid extract
Insulin
Adrenalin
Cortisone

B. Plant

EXAMPLES: Digitalis from purple foxglove
Castor oil from castor beans
Iodine from kelp or seaweed
Morphine or codeine from the white poppy

C. Mineral

EXAMPLES: Diluted hydrochloric acid
Epsom salts
Calcium
Sodium bicarbonate

D. Synthetic or chemical

EXAMPLES: Antibiotics--Streptomycin, penicillin
Sulfa drugs--Gantrisin, sulfadiazine
Synthetic steroids--Cortisone, prednisone
Hypoglycemics--Tolbutamide, chlorpropamide

V. Common classes of drugs and their actions

(NOTE: There are other classes of drugs, but these are the more common ones.)

A. Analgesic--Relieves pain

B. Anesthetic--Produces loss of feeling

(NOTE: Anesthetic can be general, local, topical, or regional.)

C. Antacid--Neutralizes acids

D. Antibiotic--Destroys bacteria

(NOTE: An antibiotic that is capable of killing a variety of bacteria is known as a wide-spectrum antibiotic.)

INFORMATION SHEET

E. Anticoagulant--Prevents or delays blood coagulation

F. Anticonvulsant--Prevents convulsions

G. Antidepressant--Elevates the mood and relieves depression

H. Antidiabetic--Used in treatment of diabetes

I. Antidote--Prevents or counteracts the action of a poison

J. Antihistamine--Reduces the production of histamine in the body

K. Antineoplastic--Inhibits or destroys cells, especially malignant tumors

L. Antipyretic--Reduces febrile temperatures

M. Antispasmodic--Reduces the passing of impulses of autonomic nervous system; stops flow of secretions and gastric and bladder contractions

N. Cardiogenic--Acts directly on the heart

O. Cathartic--Promotes or speeds up emptying of bowels

P. Depressant--Produces sedation or sleep

Q. Diuretic--Increases the output of urine

R. Emetic--Induces vomiting

S. Hallucinogen--Produces hallucinations

T. Hemostatic--Slows flow of blood

U. Hormone--Substance originating in organ or gland, that circulates in bloodstream to other organs; stimulates by chemical action an increase in function or secretions

V. Hypnotic--Produces sleep; causes insensibility to pain

W. Narcotic--Produces sleep; relieves pain

X. Tranquilizer--Reduces mental tension and anxiety

Y. Vasoconstrictor--Causes constriction of blood vessels

Z. Vasodilator--Dilates blood vessels

AA. Vitamin--Compound found in various foods; necessary for body functions

(NOTE: Vitamins can be synthetically produced and still be equivalent to the natural source.)

INFORMATION SHEET

VI. Types of names that a drug may have

EXAMPLES: Generic and official name--tetracycline
Chemical name--tetracycline hydrochloride
Trade names--Achromycin, Tetracyn, Panmycin

A. Generic

1. First letter not capitalized
2. Universally used
3. Given to the drug before the company that develops it makes it official

B. Official

1. May or may not be the same as the generic name
2. First letter not capitalized
3. Used in official publications

C. Chemical

1. Exact chemical formula of the drug
2. Meaningful chiefly to the chemist
3. First letter not capitalized

D. Trade

1. May also be called trademark or brand name
2. First letter is capitalized
3. Symbols TM or ® are used to the right of the name
4. Makes pronunciation and spelling easier

VII. Process of drug standardization to guarantee strength and purity of a drug

(NOTE: Drug standards are essential to guarantee the strength and purity of medicines. Standards are set by an association of physicians, pharmacists, and scientists known as the United States Pharmacopeial Convention and are enforced by the Food and Drug Administration.)

A. Physical examination is made for foreign or extraneous ingredients

B. Chemical analysis is completed on each component in drug

INFORMATION SHEET

C. When composition of drug is unknown, biological assay is made by administering drug to a laboratory animal under controlled environment and studying the effects

D. Clinical assay is permitted using a new drug on human patients in a controlled environment

VIII. Common sources of information about drugs (Assignment Sheet #1)

(NOTE: Many references are targeted for the nursing profession.)

A. *United States Pharmacopeia and National Formulary (USP-NF)*

(NOTE: The *USP* and *NF* were combined to give more complete descriptions of drug formulas and other important drug information.)

B. *Nurse's Guide to Drugs*

(NOTE: This book is updated each year by Intermed Communication, Inc.)

C. *Physicians' Desk Reference (PDR)*

(NOTE: This detailed book with pictures of drugs is published annually by Medical Economics, Inc.)

IX. Laws or agencies that aid in the control of drugs

A. Pure Food Act (1906)--Listed eleven narcotic and habit-forming drugs; required labeling of any preparation containing these drugs; prohibited the making of false claims about medicines

B. Federal Food, Drug, and Cosmetic Act (1938)--Provided strict regulation of the manufacture, safety, effectiveness, sale, and use of drugs; amended several times

C. Controlled Substance Act (1970)--Regulated the use of narcotics, amphetamines, amphetamine-like compounds, and barbiturate and narcotic drugs, as well as those drugs which have no accepted medical use including heroin, marijuana, and LSD

(NOTE: This act replaced the Harrison Narcotic Act passed in 1914.)

D. Food and Drug Administration--Enforces laws concerning food and drugs; receives and correlates reports from pharmaceutical firms and others reporting on adverse effects of drugs

E. Public Health Service--Part of the Department of Health and Human Services; regulates the use of biologic products

EXAMPLE: Use of purifiers in water systems

F. Federal Trade Commission--Federal agency directly responsible to the president; has the power to suppress false or misleading advertising

INFORMATION SHEET

X. Principles related to the nurse's accountability in the administration of medications

A. Institutional policies vary in the degree of responsibility a nurse is allowed or required to assume

(NOTE: In some hospitals, practical nurses may not be permitted to give any medications, or may be allowed to give medications only if a course of study has been taken. In some hospitals, nursing homes, and physicians' offices, practical nurses may give all medications, draw blood, and maintain intravenous therapy.)

B. The nurse should never administer medications unless he or she has had a course of study and practical experience

(NOTE: Most practical nursing courses do not include the techniques and curriculum for intravenous therapy. If the facility requires the nurse to administer, monitor, or maintain IV therapy, then techniques should be taught through in-service classes.)

C. A nurse is responsible for his or her own actions and can be held liable for negligent actions or omissions

(NOTE: The nurse may be considered negligent if the patient is given an incorrect medication or if the nurse fails to give a medication.)

D. If the nurse believes that a medication order is incorrect, it is his or her responsibility to bring this to the attention of the person in charge and/or the physician before giving the medication; this information should be documented

E. A nurse is responsible for his or her actions by carrying out the order of the physician; the nurse will be liable if a questionable order is carried out knowingly

(NOTE: A nurse can question and refuse to carry out a procedure if it is thought to be detrimental to the patient. This course of action should be carried out very carefully and documented accurately.)

F. When a nurse performs a task beyond the scope of professional training, he or she may be guilty of malpractice

XI. Restrictions that a nurse should consider in the control of narcotics and other medications

A. According to the Controlled Substance Act, use of certain drugs and medications must be strictly and accurately controlled

B. According to these laws, practical nurses are permitted to give narcotics under the direction and supervision of a licensed physician or dentist; otherwise, it is unlawful for practical nurses to have controlled substances in their possession

INFORMATION SHEET

C. Records are kept, noting patient's name, date and time of administration, name of drug and amount given, route of administration, and doctor's name

(NOTE: The recording of this information should be done immediately after administration.)

D. Careful, accurate records of narcotics must be kept by the nurse who gives the narcotic, including the narcotic record and necessary notes on the patient's record

E. Institutional policies concerning narcotics records vary; it is the responsibility of the individual nurse to learn the policies and procedures of the particular institution

XII. Legal and ethical responsibilities of the nurse when administering medications

A. A nurse must not suggest or prescribe medications

B. A nurse should not undermine the patient's faith in the doctor by commenting unfavorably about the orders, but should speak to the physician when recommending changes in therapy

C. A nurse must know the principal effect, adverse reactions, and compatibilities of medications being given; any unfavorable reaction must be reported and recorded promptly

D. A nurse must know why a specific drug is given for each patient

E. The nurse has a responsibility to the patient, the institution, and the physician to give and record the right medication at the prescribed time, and to be aware of the patient's reaction

F. The nurse has a legal and ethical responsibility to report and record any incorrect medication immediately so that appropriate action can be taken

G. A nurse must not take medicine which belongs to a patient or the hospital, either for his or her own use or to give to another

H. All medications should be charted AFTER administration

XIII. Facts about self-prescribed medications

A. The nurse has a serious responsibility to discourage self-prescribed medication

B. Over-the-counter medications, while usually considered harmless, may cause allergic or toxic reactions

EXAMPLE: Overdosages of vitamin D can cause serious chemical imbalances.

INFORMATION SHEET

C. Self-prescribed medications may afford temporary relief of symptoms, delaying the person from seeking needed medical advice

D. Habituation and addiction may result from self-prescribed medication

XIV. Guidelines to use in the administration of oral and parenteral medications to infants, children, adolescents, and geriatric patients

A. Infants and young children

1. Oral administrations should be in liquid form and can be mixed with small amounts of formula, water, or food

2. Parenteral administrations should be given in the vastus lateralis site for infants; the gluteus medius site may be used for young children

B. Children

1. Oral medications should be liquid or chewable type

(NOTE: Children should not be tricked or bribed into taking medicine when they are old enough to understand that they are taking medication. Be consistent when giving children medications; expect them to take the medication. *Never* ask, "Are you ready to take your medicine?")

2. Parenteral medications should be administered quickly and efficiently, using someone to hold the child if needed to avoid any sudden movements

(NOTE: Never tell a child that the injection will not hurt. You will destroy any trust the child has in you. Always praise the child for willingness to cooperate.)

C. Adolescents

1. Dosage of medication is usually equal to or slightly less than that of an adult

2. Parenteral medications should not be a problem if patient is treated as an adult

D. Geriatric patients

1. Dosage of medications may be somewhat less than that for the young or middle-aged adult

2. Oral medication in tablet or capsule form may be difficult for the patient to swallow

INFORMATION SHEET

3. Parenteral sites must be observed carefully because skin breakdown can occur easily

4. Observe closely because adverse reactions happen quickly, and combinations of drugs can cause untoward effects

XV. Forms of drugs

A. Solids

1. Extract--Concentrated solid preparation of drugs made by dissolving a crude drug in a solvent, allowing the solution to evaporate, and forming the sediment into tablets or capsules

2. Powder--Medicinal preparation in fine particles

3. Pill--Drug shaped in small balls or ovals; may be coated to disguise the taste

4. Capsule--Small, cylindrical gelatin container filled with powder or granules

5. Tablet--Dried, powdered drug pressed into a flat disc

   (NOTE: Tablets may be enteric coated and/or scored for easy breaking when smaller doses are needed.)

6. Suppository--Mixture of drugs in a firm base such as glyceride or vegetable fat, which melts at body temperature

7. Ointment--Mixture of drugs in an oily base which spreads easily at body temperature; used for topical treatments

8. Cream--Mixture of drugs in a water base that may be spread easily and rubbed into the skin

9. Lozenge--Flat disc containing a drug and a sweetening agent, usually sugar

B. Liquids

1. Fluidextract--Concentrated liquid preparation made by dissolving a crude plant drug in an appropriate solvent

   (NOTE: Usually, one ml/cc of fluidextract contains one gram of the drug.)

2. Tincture--Diluted alcoholic extract of drugs; strength varies, usually from ten to twenty percent

3. Spirit--Volatile preparation of drugs dissolved in alcohol

4. Syrup--Drug prepared in sugar and water solution

INFORMATION SHEET

5. Elixir--Palatable preparation of drugs dissolved in a mixture of alcohol, sugar, and an aromatic
6. Suspension--Liquid mixture with ingredients which tend to separate
7. Milk--Bulky suspension of drug preparations in a solvent, usually water
8. Emulsion--Suspension of oily or fatty substances in water
9. Liniment--Mixture of drugs with soap, oil, water, or alcohol to be used for external application only
10. Lotion--Preparation of drugs suspended in an aqueous solution

XVI. Systems of measurements

A. Apothecaries'

1. Based on weights and volumes of simple items such as a grain of wheat, a small stone, or a container of liquid; began in ancient Greek and Roman times
2. Used by the British and Americans
3. Uses symbols or abbreviations and Roman numerals for written measurements of medication

   EXAMPLES: One and one-half drams is written ʒiss

   Three ounces is written ℥iii

B. Metric

1. Invented by the French in the late eighteenth century
2. Based on decimal system; uses units and multiples of ten
3. Uses abbreviations and Arabic numerals for written measurements of medication

   EXAMPLES: Ten grams is written 10 gm.
   One thousand milliliters or cubic centimeters is written 1,000 ml or cc.

C. Household

1. Uses common utensils

   EXAMPLES: Teaspoons, tablespoons, measuring cups

2. Is approximate

   (NOTE: Household system should be used only when other measurements are not readily available.)

INFORMATION SHEET

3. Enables nurse to give instructions to patient or parent if either of other two systems is not understood

XVII. Apothecaries' equivalents of dry weight and liquid volume

- A. Dry weight
    1. 60 grains = 1 dr
    2. 8 drams = 1 oz
    3. 12 ounces = 1 pound, pd, or lb

    (NOTE: Avoirdupois weight is used in weighing all articles except drugs, gold, silver, and precious stones. In avoirdupois weight sixteen drams equal one ounce, and sixteen ounces equal one pound.)
- B. Liquid volume
    1. 60 minims = 1 fluidram f ʒi
    2. 8 fluidrams = 1 fluidounce f ℥i
    3. 16 ounces = 1 pint
    4. 2 pints = 1 quart
    5. 4 quarts = 1 gallon

XVIII. Metric prefixes

A.	Micro--One-millionth	0.000001
B.	Milli--One-thousandth	0.001
C.	Centi--One-hundredth	0.01
D.	Deci--One-tenth	0.1
E.	Unit--One	1.0
F.	Deka or deca--Ten	10.0
G.	Hecto--One hundred	100.0
H.	Kilo--One thousand	1000.0

XIX. Units used in measuring systems

- A. Apothecaries'
    1. Grain
    2. Dram

INFORMATION SHEET

3. Ounce
4. Pound
5. Minim
6. Pint
7. Quart
8. Gallon

B. Metric

1. Gram
2. Cubic centimeter
3. Liter
4. Milligram
5. Microgram
6. Kilogram

C. Household

1. Drop
2. Teaspoon
3. Tablespoon
4. Ounce
5. Cup (measuring)
6. Pint
7. Quart

XX. Abbreviations used in measuring systems

A. Gram--gm

(NOTE: 1,000 grams = 1 kilogram.)

B. Cubic centimeter--cc

(NOTE: 1,000 cubic centimeters = 1 liter.)

INFORMATION SHEET

C. Milliliter--ml

(NOTE: 1 ml is equivalent to 1 cc.)

D. Liter--L

(NOTE: 1,000 millimeters = 1 liter.)

E. Milligram--mg

(NOTE: 1,000 milligrams = 1 gram.)

F. Microgram--mcg

G. Kilogram--kg

H. Pound--pd or lb

I. Minim-- ♏

J. Pint--pt

K. Quart--qt

L. Gallon--gal

M. Drop--gt

(NOTE: The plural abbreviation for drop is gtt.)

N. Teaspoon--t or tsp

(NOTE: 60 gtt = 1 tsp.)

O. Tablespoon--T or tbsp

(NOTE: Three or four teaspoons equals one tablespoon. This is an approximate type of measurement and not a very reliable system of measurement for medications.)

P. Measuring cup--c

Q. Grain--gr

R. Dram--dr or ʒ

S. Ounce--oz or ℥

(NOTE: 6 oz = 1 teacupful.)

INFORMATION SHEET

XXI. Approximate equivalent measures of weight and volume (Assignment Sheet #2)

WEIGHT

(NOTE: A measure of weight, such as a gram or pound, indicates how heavy an item is. It is used for solid or dry measure.)

METRIC	APOTHECARIES'	HOUSEHOLD
0.1 gm	gr 1 1/2	--
1 gm	gr 15	1/4 tsp
4 gm	1 dr	1 tsp
30 gm	1 oz	8 tsp
60 mg	gr 1	--
15 mg	gr 1/4	--
10 mg	gr 1/6	--
0.4 mg	gr 1/150	--
1.0 kg	--	2.2 lb

VOLUME

(NOTE: A measure of volume, such as a cubic centimeter or a pint, indicates how much space an item occupies. It is used for liquid measure.)

METRIC	APOTHECARIES'	HOUSEHOLD
1 ml/cc	15 ♏	15 gtt
5 ml/cc (NOTE: In some books 4 ml/cc will be used, but 5 ml/cc is the standard.)	60 ♏/1 dr	1 tsp
15 ml/cc	1/2 oz	3-4 tsp/1 tbsp
30 ml/cc	8 dr/ 1 oz	6-8 tsp/2 tbsp
240 to 250 ml/cc (NOTE: This measurement will be shown differently in various sources.)	8 oz	1 glassful
500 ml/cc	1 pt	2 measuring cups
1000 ml/cc/1L	1 qt	4 measuring cups

INFORMATION SHEET

XXII. Converting grams (gm) to grains (gr)--Multiply the number of grams by 15 (Assignment Sheet #3)

(NOTE: There are 15 grains in 1 gm.)

EXAMPLE: Change 30 grams to grains.
30 x 15 = gr 450

XXIII. Converting grains (gr) to grams (gm)--Divide the number of grains by 15 or 16, or multiply by 0.065 (Assignment Sheet #3)

(NOTE: There are 15 grains in 1 gm, and 0.065 gm equals gr 1. Fifteen grains of a substance weigh a little less than 1 gm, and 16 grains weigh a little more; therefore, you may use 15 or 16 as the approximate equivalent.)

EXAMPLE: Change 30 grains to grams.
30÷15 = 2 gm

XXIV. Converting grams (gm) to milligrams (mg) (Assignment Sheet #4)

A. Multiply the number of grams by 1000

EXAMPLE:

$$\begin{array}{r} 0.016 \\ \underline{\times 1000} \\ 16.000 = 16\ \text{mg} \end{array}$$

B. Move the decimal point three places to the right

EXAMPLE: $0.\underset{\curvearrowright}{016} = 6.0$ mg

XXV. Converting milligrams (mg) to grams (gm) (Assignment Sheet #4)

A. Divide the number of milligrams by 1000

EXAMPLE: Change 13 mg to gm.

$$\begin{array}{r} 0.013\ \text{gm} \\ 1000\overline{)\,13.000} \\ \underline{1000} \\ 3000 \\ \underline{3000} \end{array}$$

B. Move the decimal point three places to the left

EXAMPLE: $13.0 = 0\underset{\curvearrowleft}{013}.0 = 0.013$ gm

INFORMATION SHEET

XXVI. Abbreviations and/or symbols pertaining to administration of medications

ABBREVIATION OR SYMBOL	MEANING
aa	of each
ac	before meals
ad	to
ad lib	as desired
amp	ampule
aq	water
aq dist	distilled water
bid	twice a day
bin	twice a night
cap	capsule
$\bar{c}$	with
cc	cubic centimeter
comp	compound
DC	discontinue
dr, ʒ	dram
elix	elixir
EC	enteric coated
ext	extract
Fe	iron
Fld	fluid
gm	gram
gr	grain
gtt	drops
H, hypo	hypodermic

INFORMATION SHEET

ABBREVIATION OR SYMBOL	MEANING
h	hour
hs	hours of sleep, bedtime
IM	intramuscular
IV	intravenous
L	liter
liq	liquid
♏	minim
mcg	microgram
mg	milligram
ml	milliliter
mEq	milliequivalent
noc, n	night
non rep	do not repeat
ol	oil
OD	right eye
OU	both eyes
OS	left eye
qm	every morning
qn	every night
os	mouth
oz, ℥	ounce
pc	after meals
per	through, by
po, per os	by mouth
pil	pill

INFORMATION SHEET

ABBREVIATION OR SYMBOL	MEANING
pre-op	preoperative
prn	as needed
pulv	powder
$\bar{q}$	every
qd	every day
qh	every hour
qid	four times a day
qod	every other day
qs	quantity sufficient
R	rectal
Rx	take
$\bar{s}$	without
sc, subcu	subcutaneous
sol	solution
sp	spirit
$\overline{ss}$	one-half
stat	at once
syr	syrup
tab	tablet
tid	three times a day
tin	three times a night
tr, tinc	tincture
u, U	unit
ung	ointment
vin	wine

INFORMATION SHEET

ABBREVIATION OR SYMBOL	MEANING
I,i	one
II,ii	two
III, iii	three
IV, iv	four
V, v	five
VI, vi	six
VII, vii	seven
VIII, viii	eight
IX, ix	nine
X, x	ten

INTRODUCTION TO PHARMACOLOGY
UNIT I

ASSIGNMENT SHEET #1--USE DRUG INFORMATION REFERENCE

NAME________________________________ SCORE ______________

A drug should never be given unless the person who administers the substance knows important information. If you are giving a medication, you should know the following information: name of drug, correct dosage, what it is used for, and any side effects that may follow the use of the drug. The *Physicians' Desk Reference* is one good source of information. Become familiar with its use so that you can turn to the correct page quickly and find needed information. The *PDR* is color coded for ease of use. Using the *PDR* provided by your instructor, select a drug in each class and look up information that you would need.

EXAMPLES: Tranquilizer--Valium

Antispasmodics--Combid

A. BARBITURATES

Name of drug:____

Usual dosage:____

What is it used for:__________________________________

Side effects:____

____

____

____

B. ANTIBIOTICS

Name of drug:____

Usual dosage:____

What is it used for:__________________________________

Side effects:____

____

____

____

ASSIGNMENT SHEET #1

C. ANTACIDS

Name of drug: ______________________________

Usual dosage: ______________________________

What is it used for: ______________________________

Side effects: ______________________________

____

____

____

D. ANTIHISTAMINES

Name of drug: ______________________________

Usual dosage: ______________________________

What is it used for: ______________________________

Side effects: ______________________________

____

____

____

E. NARCOTICS

Name of drug: ______________________________

Usual dosage: ______________________________

What is it used for: ______________________________

Side effects: ______________________________

____

____

____

ASSIGNMENT SHEET #1

F. DIURETICS

Name of drug: __________

Usual dosage: __________

What is it used for: __________

Side effects: __________

G. ANTIPYRETICS

Name of drug: __________

Usual dosage: __________

What is it used for: __________

Side effects: __________

H. ANTIDEPRESSANTS

Name of drug: __________

Usual dosage: __________

What is it used for: __________

Side effects: __________

INTRODUCTION TO PHARMACOLOGY
UNIT I

ASSIGNMENT SHEET #2--PRACTICE USING HOUSEHOLD, APOTHECARIES', AND METRIC SYSTEMS

NAME ________________________________ SCORE ______________

Practice using household, apothecaries', and metric systems by completing the following statements.

(NOTE: Begin each list with the smallest and end with the largest unit.)

PART I

A. List the units of dry measure used in the apothecaries' system.

1. ______________________
2. ______________________
3. ______________________
4. ______________________

B. List the units of liquid volume measure used in the apothecaries' system.

1. ______________________
2. ______________________
3. ______________________
4. ______________________
5. ______________________
6. ______________________

C. List the units of measure in the household system.

1. ______________________
2. ______________________
3. ______________________
4. ______________________
5. ______________________
6. ______________________
7. ______________________

ASSIGNMENT SHEET #2

PART II

A. Write symbols for the following units of measure.

1. Minims one __________
2. A grain __________
3. Three drops __________
4. One-tenth of a grain __________
5. One-fourth of a grain __________
6. One dram __________
7. Six drams __________
8. One-half ounce __________
9. One ounce __________
10. Fifteen minims __________

B. State the apothecaries' equivalents of the following amounts.

1. One minim of water = __________ drops
2. One dram = __________ ounces
3. One ounce = __________ drams
4. Four drams = __________ ounces
5. Six drams = __________ ounces
6. One-half ounce = __________ drams

C. State the equivalents for the following amounts.

1. One dram = __________ teaspoons
2. One ounce = __________ tablespoons
3. One-half ounce = __________ tablespoons/__________ teaspoons
4. One teaspoon = __________ drams
5. One tablespoon = __________ drams
6. One tablespoon = __________ ounces
7. One cup = __________ tablespoons
8. One cup = __________ ounces
9. One pint = __________ ounces
10. Thirty-two ounces = __________ pints/__________ quarts

ASSIGNMENT SHEET #2

PART III

Complete the following statements.

A. The common units of liquid measure in the metric system are ____________________ ____.

B. The common units of dry measure in the metric system are ____________________ ____.

C. The physician has ordered drugs in grams, but you find the label expresses the amount in milligrams. Show the equivalent for each of the following.

1. One gram = _____ mg
2. 0.9 gram = _____ mg
3. 0.8 gram = _____ mg
4. 0.75 gram = _____ mg
5. 0.5 gram = _____ mg
6. 0.1 gram = _____ mg
7. 100 mg = _____ gm
8. 250 mg = _____ gm
9. 500 mg = _____ gm
10. 750 mg = _____ gm
11. 1000 mg = _____ gm

D. Express the following amounts in equivalent metric units.

1. Fifteen minims = _____ ml/cc
2. One dram = _____ ml/cc
3. Four drams = _____ ml/cc
4. One ounce = _____ ml/cc
5. Fifteen grains = _____ gm
6. One grain = _____ mg
7. One tsp = _____ ml/cc
8. One tbsp = _____ ml/cc
9. Two tbsp = _____ ml/cc
10. One cup = _____ ml/cc
11. One pint = _____ml/cc
12. One quart = _____ ml/cc

INTRODUCTION TO PHARMACOLOGY
UNIT I

ASSIGNMENT SHEET #3--CONVERT GRAMS TO GRAINS, GRAINS TO GRAMS

NAME ______________________________ SCORE ______________

Converting amounts of drugs from system to system is an important step in computing dosages. Memorization of the various systems and their equivalents can assist you in this conversion, and knowing how to figure the amounts will make computing dosages much easier. Solve the following problems and show all work on this page. Hand in to instructor for evaluation.

A. 6 gm = gr______________

B. 3 gm = gr______________

C. 15 gm = gr______________

D. 30 gm = gr______________

E. 1 gm = gr______________

F. gr 10 = ______________ gm

G. gr 7 1/2 = ______________ gm

H. gr 15 = ______________ gm

I. gr 5 = ______________ gm

J. gr 1 = ______________ gm

INTRODUCTION TO PHARMACOLOGY
UNIT I

ASSIGNMENT SHEET #4–CONVERT GRAMS TO MILLIGRAMS, MILLIGRAMS TO GRAMS

NAME ______________________________ SCORE ______________

Converting milligrams to grams and back again is easy if you use the correct formula. Solve the following problems. Show all your work on this page and hand in to instructor for evaluation.

A. 3 gm = ____________ mg

B. 1 1/2 gm = ____________ mg

C. 3/4 gm = ____________ mg

D. 0.045 gm = ____________ mg

E. 0.02 gm = ____________ mg

F. 15 mg = ____________ gm

G. 500 mg = ____________ gm

H. 125 mg = ____________ gm

I. 7 1/2 mg = ____________ gm

J. 1500 mg = ____________ gm

INTRODUCTION TO PHARMACOLOGY
UNIT I

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

Assignment Sheet #2

PART I

A.
1. Grain
2. Dram
3. Ounce
4. Pound

B.
1. Minim
2. Dram or fluidram
3. Ounce or fluidounce
4. Pint
5. Quart
6. Gallon

C.
1. Drop
2. Teaspoon
3. Tablespoon
4. Ounce
5. Cup (measuring)
6. Pint
7. Quart

PART II

A.
1. ♏ i̇
2. gr i̇
3. gtt i̇i̇i̇
4. gr 1/10
5. gr 1/4
6. ʒ i̇
7. ʒ vi̇
8. ℥ ṡṡ
9. ℥ i̇
10. ♏ xv

B.
1. One
2. One-eighth
3. Eight
4. One-half
5. Three-fourths
6. Four

ANSWERS TO ASSIGNMENT SHEETS

C. 1. One
2. Two
3. One, three or four
4. One
5. Three or four
6. One-half
7. Sixteen
8. Eight
9. Sixteen
10. Two, one

PART III

A. Milliliter/cubic centimeter and liter

B. Microgram, milligram, gram, kilogram

C. 1. 1000
2. 900
3. 800
4. 750
5. 500
6. 100
7. 0.1
8. 0.25
9. 0.5
10. 0.75
11. 1.0

D. 1. One
2. Five
3. Twenty
4. Thirty
5. One
6. Sixty
7. Five
8. Fifteen
9. Thirty
10. Two hundred fifty
11. Five hundred
12. One thousand

Assignment Sheet #3

A. 6 gm x 15 = gr 90
B. 3 gm x 15 = gr 45
C. 15 gm x 15 = gr 225
D. 30 gm x 15 = gr 450
E. 1 gm x 15 = gr 15
F. gr 10 x 0.065 = 0.650 gm
G. gr 7 1/2 ÷ 15 = 0.5 gm
H. gr 15 ÷ 15 = 1.0 gm
I. gr 5 x 0.065 = 0.325 gm
J. gr 1 x 0.065 = 0.065 gm

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #4

A. 1. 3 gm = 3.000 = 3000 mg
   2. 3 gm x 1000 = 3000 mg

B. 1. 1 1/2 gm = 1.500 = 1500 mg
   2. 1.5 gm x 1000 = 1.5 x 1000 = 1500 mg

C. 1. 3/4 gm = 0.750 = 750 mg
   2. 0.750 x 1000 = 750 mg

D. 1. 0.045 gm = 0.045 = 45 mg
   2. 0.045 x 1000 = 45 mg

E. 1. 0.02 gm = 0.020 = 20 mg
   2. 0.02 x 1000 = 20 mg

F. 1. 15 mg = 0015. = 0.015 gm
   2. 15÷1000 = 0.015 gm

G. 1. 500 mg = 0500. = 0.5 gm
   2. 500÷1000 = 0.5 gm

H. 1. 125 mg = 0125. mg = 0.125 gm
   2. 125÷1000 = 0.125 gm

I. 1. 7 1/2 mg = 0007.5 = 0.0075 gm
   2. 7 1/2÷1000 = 0.0075 gm

J. 1. 1500 mg = 1500. = 1.5 gm
   2. 1500÷1000 = 1.5 gm

INTRODUCTION TO PHARMACOLOGY
UNIT I

TEST

NAME ________________________________ SCORE ______________

1. Match terms associated with basic pharmacology to their correct definitions. Write the correct numbers in the blanks. Terms and definitions are continued on the next page.

______ a. Unit of fluid measure; volume occupied by one kilogram of water at 4° centigrade; slightly more than one quart

______ b. Within the skin

______ c. Unit of weight in the metric system; weight of one cubic centimeter of water at 4° centigrade

______ d. Weight of a substance contained in one milliliter (1 cc) of a normal solution

______ e. Covered with a substance that resists dissolution in stomach pH and begins to dissolve only when reaching the small intestine

______ f. Within a muscle

______ g. Beneath the skin

______ h. Unit of weight in the apothecaries' system; determined by the average weight of a grain of wheat

______ i. Within a vein

______ j. Unit of linear measurement in the metric system

______ k. Study of the actions of drugs on living organisms

______ l. Profession, or place of preparing and dispensing drugs

______ m. Medication; chemical or other substance intended to have a therapeutic effect

______ n. Person licensed to practice pharmacy

______ o. Use of any substance which affects mood or behavior to the extent that such use causes physical, mental, or social harm

1. Hypodermic or subcutaneous
2. Milliequivalent
3. Intradermal
4. Liter
5. Grain
6. Meter
7. Enteric coated
8. Gram
9. Intravenous
10. Intramuscular
11. Drug misuse
12. Pharmacology
13. Drug
14. Pharmacist
15. Pharmacy

TEST

_____p. Physician's medication order

_____q. Amount of medicine to be administered to a patient at one time

_____r. Treatment of illness by chemical means (by medication)

_____s. Book containing a selected list of medicinal preparations and their dosage forms; provides a description and the standards for purity and strength for each drug listed

_____t. Chemical compound produced by and obtained from a living organism or cell; able to inhibit or kill other microorganisms

_____u. Medicinal preparations made from living organisms and their products, including serums, vaccines, antigens, and antitoxins

_____v. Study of the sources, physical characteristics, composition, preparation, dosage, and effects of the substances used in treating the sick

_____w. Easily vaporized or evaporated

_____x. Designating any route other than alimentary canal

_____y. Generalized or affecting the entire body

16. Prescription
17. Dosage
18. Chemotherapy
19. Volatile
20. Materia medica
21. Antibiotic
22. Systemic effect
23. Pharmacopeia
24. Biologic products
25. Parenteral

2. Match historical events or persons that have contributed to the field of pharmacology to their correct descriptions. Write the correct numbers in the blanks. Continued on the next page.

_____a. Greek physician of the fifth century B.C. who is called the "Father of Medicine"

_____b. Discovered the X ray in 1895

_____c. Developed polio vaccines in 1955 and 1961, respectively

_____d. Published in London in 1618; included 1900 remedies; based largely on the works of Galen and the Arabian physicians

_____e. Advanced the science of medicine and pharmacy in the ninth and tenth centuries; compiled the first pharmacopeia

1. Salk and Sabin
2. Wilhelm Roentgen
3. Arabians
4. First pharmacopeia in Britain
5. Hippocrates

TEST

_____ f. God of healing in Roman mythology

_____ g. Founder of modern antiseptic surgery in London in the 1860s

_____ h. *The French Codex* published in 1818

_____ i. Used herbs and vile-tasting concoctions to drive out evil spirits

_____ j. Set forth one of the earliest codes of sanitation

_____ k. Developed preventive inoculations for rabies, chicken cholera, and anthrax (1822-1895)

_____ l. Discovered radium in 1893

_____ m. English physician who discovered the principle of smallpox vaccination in 1796

_____ n. Egyptian scroll written about 1600 B.C.; describes many prescriptions and medicinal formulas

_____ o. Greek physician of the second century whose observations and writings influenced medicine for many centuries

_____ p. First used insulin in treating diabetes in Canada in 1922

_____ q. Published in 1820

_____ r. Used cinchona, which is similar to quinine, to treat malaria; used coca, from which cocaine is derived, to relieve pain

_____ s. Used rauwolfia to calm the restless and treat heart disease

_____ t. Discovered penicillin by accident in 1929

6. Aesculapius
7. Lord Lister
8. First national pharmacopeia
9. Sir Alexander Fleming
10. Madame Curie
11. Banting and Best
12. Louis Pasteur
13. Primitive medicine man
14. Moses
15. Edward Jenner
16. Ebers papyrus
17. Galen
18. First American pharmacopeia
19. Peruvians
20. Hindus

3. List general purposes for which drugs are used.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

TEST

4. List sources of drugs.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

5. Match common classes of drugs to their actions. Write the correct numbers in the blanks. Continued on the next page.

_____a. Induces vomiting

_____b. Produces sleep; causes insensibility to pain

_____c. Produces loss of feeling

_____d. Dilates blood vessels

_____e. Promotes or speeds up emptying of bowels

_____f. Elevates the mood and relieves depression

_____g. Compound found in various foods; necessary for body functions

_____h. Slows flow of blood

_____i. Used in treatment of diabetes

_____j. Relieves pain

_____k. Destroys bacteria

_____l. Increases the output of urine

_____m. Produces sleep; relieves pain

_____n. Reduces the production of histamine in the body

_____o. Neutralizes acids

_____p. Produces hallucinations

_____q. Prevents or counteracts the action of a poison

_____r. Reduces the passing of impulses of autonomic nervous system; stops flow of secretions and gastric and bladder contractions

1. Analgesic
2. Anesthetic
3. Antacid
4. Antibiotic
5. Antidepressant
6. Antidiabetic
7. Antidote
8. Antihistamine
9. Antispasmodic
10. Narcotic
11. Cathartic
12. Vasodilator
13. Diuretic
14. Emetic
15. Hallucinogen
16. Hemostatic
17. Vitamin
18. Hypnotic

TEST

_____s. Acts directly on the heart

_____t. Produces sedation or sleep

_____u. Substance originating in organ or gland, that circulates in bloodstream to other organs; stimulates by chemical action an increase in function or secretions

_____v. Causes constriction of blood vessels

_____w. Prevents convulsions

_____x. Reduces mental tension and anxiety

_____y. Inhibits or destroys cells, expecially malignant tumors

_____z. Prevents or delays blood coagulation

_____aa. Reduces febrile temperatures

19. Cardiogenic
20. Vasoconstrictor
21. Depressant
22. Hormone
23. Tranquilizer
24. Antineoplastic
25. Antipyretic
26. Anticoagulant
27. Anticonvulsant

6. Distinguish among types of names that a drug may have. Write a "G" in the blanks before characteristics of a generic name, an "O" before characteristics of an official name, a "C" before characteristics of a chemical name, and a "T" in the blanks before characteristics of a trade name. (Some blanks may contain more than one letter.)

_____a. May or may not be the same as the generic name

_____b. May also be called trademark or brand name

_____c. Universally used

_____d. Exact chemical formula of the drug

_____e. Makes pronunciation and spelling easier

_____f. Used in official publications

_____g. Given to the drug before the company that develops it makes it official

_____h. First letter not capitalized

_____i. Meaningful chiefly to the chemist

_____j. Symbols TM or ® are used to the right of the name

_____k. First letter is capitalized

TEST

7. Describe the process of drug standardization to guarantee strength and purity of a drug.

____

____

____

____

8. List common sources of information about drugs.

a. ____

b. ____

c. ____

9. Match laws or agencies that aid in the control of drugs to their correct descriptions. Write the correct numbers in the blanks.

_____a. Federal agency directly responsible to the president; has the power to suppress false or misleading advertising

_____b. Provided strict regulation of the manufacture, safety, effectiveness, sale, and use of drugs; amended several times

_____c. Listed eleven narcotic and habit-forming drugs; required labeling of any preparation containing these drugs; prohibited the making of false claims about medicines

_____d. Enforces laws concerning food and drugs; receives and correlates reports from pharmaceutical firms and others reporting on adverse effects of drugs

_____e. Regulated the use of narcotics, amphetamines, amphetamine-like compounds, and barbiturate and narcotic drugs, as well as those drugs which have no accepted medical use including heroin, marijuana, and LSD

_____f. Part of the Department of Health and Human Services; regulates the use of biologic products

1. Pure Food Act (1906)
2. Federal Food, Drug, and Cosmetic Act (1938)
3. Controlled Substance Act (1970)
4. Food and Drug Administration
5. Public Health Service
6. Federal Trade Commission

TEST

10. State principles related to the nurse's accountability in the administration of medications.

a. ____________________

____

b. ____________________

____

c. ____________________

____

d. ____________________

____

e. ____________________

____

f. ____________________

____

11. Select from the following list restrictions that the nurse should consider in the control of narcotics and other medications. Write an "X"in the blank before each correct answer.

_____a. According to the Controlled Substance Act, use of certain drugs and medications must be strictly and accurately controlled

_____b. According to these laws, practical nurses are permitted to give narcotics under the direction and supervision of a licensed physician or dentist; otherwise, it is unlawful for practical nurses to have controlled substances in their possession

_____c. Nurse may write prescriptions for narcotic medications provided nurse is certified by the pharmacy board

_____d. Nurses may administer narcotic drugs obtained by another staff member as long as the physician knows this information

_____e. Institutional policies concerning narcotics records vary; it is the responsibility of the individual nurse to learn the policies and procedures of the particular institution

_____f. Documentation of administering narcotics may be done before they are administered

_____g. Records are kept, noting patient's name, date and time of administration, name of drug and amount given, route of administration, and doctor's name

_____h. Careful, accurate records of narcotics must be kept by the nurse who gives the narcotic, including the narcotic record and necessary notes on the patient's record

TEST

12. State legal and ethical responsibilities of the nurse when administering medication.

a. ____

____

b. ____

____

c. ____

____

d. ____

____

e. ____

____

f. ____

____

g. ____

____

h. ____

____

13. Select from the following list facts about self-prescribed medications. Write an "X" in the blank before each correct answer.

______a. Self-prescribed medication is illegal in some states

______b. Self-prescribed medications may afford temporary relief of symptoms, delaying the person from seeking needed medical advice

______c. Over-the-counter medications are not strong enough to be harmful

______d. Over-the-counter medications, while usually considered harmless, may cause allergic or toxic reactions

______e. The nurse has a serious responsibility to discourage self-prescribed medication

______f. Habituation and addiction may result from self-prescribed medication

TEST

14. Describe guidelines to use in the administration of oral and parenteral medications to infants, children, adolescents, and geriatric patients.

   a. Infants and young children--____________________

   b. Children-- ____________________

   c. Adolescents-- ____________________

   d. Geriatric patients--____________________

TEST

15. Match forms of drugs to their correct descriptions. Write the correct numbers in the blanks. Continued on the next page.

Solids

______a. Small, cylindrical gelatin container filled with powder or granules
______b. Flat disc containing a drug and a sweetening agent, usually sugar
______c. Medicinal preparation in fine particles
______d. Mixture of drugs in a firm base such as glyceride or vegetable fat, which melts at body temperature
______e. Drug shaped in small balls or ovals; may be coated to disguise the taste
______f. Concentrated solid preparation of drugs made by dissolving a crude drug in a solvent, allowing the solution to evaporate, and forming the sediment into tablets or capsules
______g. Mixture of drugs in an oily base which spreads easily at body temperature; used for topical treatments
______h. Dried, powdered drug pressed into a flat disc
______i. Mixture of drugs in a water base that may be spread easily and rubbed into skin

1. Suppository
2. Powder
3. Lozenge
4. Capsule
5. Tablet
6. Extract
7. Ointment
8. Pill
9. Cream

Liquids

______a. Suspension of oily or fatty substances in water
______b. Volatile preparation of drugs dissolved in alcohol
______c. Bulky suspension of drug preparations in a solvent, usually water
______d. Palatable preparation of drugs dissolved in a mixture of alcohol, sugar, and an aromatic
______e. Drug prepared in sugar and water solution
______f. Liquid mixture with ingredients which tend to separate

1. Milk
2. Emulsion
3. Spirit
4. Syrup
5. Elixir
6. Suspension

TEST

______g. Preparation of drugs suspended in an aqueous solution

______h. Diluted alcoholic extract of drugs; strength varies, usually from ten to twenty percent

______i. Mixture of drugs with soap, oil, water, or alcohol to be used for external application only

______j. Concentrated liquid preparation made by dissolving a crude plant drug in an appropriate solvent

7. Fluidextract
8. Tincture
9. Liniment
10. Lotion

16. Distinguish among systems of measurement. Write an "A" in the blanks before characteristics of the apothecaries' system, an "M" before characteristics of the metric system, and an "H" in the blanks before characteristics of the household system.

______a. Based on decimal system; uses units and multiples of ten

______b. Used by the British and Americans

______c. Invented by the French in the late eighteenth century

______d. Uses common utensils

______e. Uses symbols or abbreviations and Roman numerals for written measurements of medication

______f. Based on weights and volumes of simple items such as a grain of wheat, a small stone, or a container of liquid; began in ancient Greek and Roman times

______g. Is approximate

______h. Uses abbreviations and Arabic numerals for written measurements of medication

______i. Enables nurse to give instructions to patient or parent if either of other two systems is not understood

17. Write apothecaries' equivalents of dry weight and liquid volume.

a. Dry weight

1) 12 ounces = ______________

2) 60 grains = ______________

3) 8 drams = ______________

TEST

b. Liquid volume

1) 2 pints = ____________

2) 4 quarts = ____________

3) 8 fluidrams = ____________

4) 60 minims = ____________

5) 16 ounces = ____________

18. Match metric prefixes to their correct values. Write the correct numbers in the blanks.

_____a. One-hundredth (0.01)

_____b. Ten (10.0)

_____c. One hundred (100.0)

_____d. One-thousandth (0.001)

_____e. One-millionth (0.000001)

_____f. One thousand (1000.0)

_____g. One (1.0)

_____h. One-tenth (0.1)

1. Micro
2. Milli
3. Centi
4. Deci
5. Unit
6. Deka or deca
7. Hecto
8. Kilo

19. Distinguish among units used in measuring systems. Write an "A" in the blanks before apothecaries' units, an "M" before metric units, and an "H" in the blanks before household units.

_____a. Drop

_____b. Quart

_____c. Ounce

_____d. Dram

_____e. Grain

_____f. Gram

_____g. Minim

_____h. Microgram

_____i. Cup (measuring)

_____j. Pound

_____k. Gallon

_____l. Tablespoon

_____m. Kilogram

_____n. Teaspoon

_____o. Milligram

_____p. Pint

_____q. Liter

_____r. Cubic centimeter

TEST

20. Write abbreviations used in measuring systems.

a. Drop-- ____________________

b. Kilogram-- ____________________

c. Ounce-- ____________________

d. Gallon-- ____________________

e. Gram-- ____________________

f. Grain-- ____________________

g. Milligram-- ____________________

h. Liter-- ____________________

i. Measuring cup-- ____________________

j. Dram-- ____________________

k. Tablespoon-- ____________________

l. Pound-- ____________________

m. Cubic centimeter-- ____________________

n. Pint-- ____________________

o. Microgram-- ____________________

p. Teaspoon-- ____________________

q. Quart-- ____________________

r. Minim-- ____________________

s. Milliliter-- ____________________

21. Write approximate equivalent measures of weight and volume. Write the correct measures in the blanks provided.

WEIGHT		
METRIC	**APOTHECARIES'**	**HOUSEHOLD**
a. ____________	gr 1 1/2	--
1 gm	b. ____________	1/4 tsp
4 gm	1 dr	c. ____________
30 gm	d. ____________	8 tsp
e. ____________	gr 1	--
f. ____________	gr 1/4	--
10 mg	g. ____________	--
0.4 mg	h. ____________	--
1.0 kg	--	i. ____________

TEST

VOLUME		
METRIC	**APOTHECARIES'**	**HOUSEHOLD**
1 ml/cc	j. ________________	k. ________________
5 ml/cc	60 ♏/1 dr	l. ________________
m. ____________	1/2 oz	3-4 tsp/1 tbsp/
30 ml/cc	n. ________________	6-8 tsp/2 tbsp
240 to 250 ml/cc	8 oz	o. ________________
p. ____________	1 pt	2 measuring cups
1000 ml/cc/1 L	1 qt	q. ________________

22. Convert 6 gm to gr. Show your work below.

23. Convert gr 45 to gm. Show your work below.

24. Convert 0.0006 gm to mg. Show your work below.

25. Convert 100 mg to gm. Show your work below.

TEST

26. Write abbreviations and/or symbols pertaining to administration of medications.

a. hour ____________

b. hours of sleep, bedtime ____________

c. intramuscular ____________

d. intravenous ____________

e. liter ____________

f. liquid ____________

g. minim ____________

h. milligram ____________

i. milliequivalent ____________

j. night ____________

k. do not repeat ____________

l. oil ____________

m. right eye ____________

n. both eyes ____________

o. left eye ____________

p. every morning ____________

q. every night ____________

r. mouth ____________

s. ounce ____________

t. after meals ____________

u. through, by ____________

v. by mouth ____________

w. pill ____________

x. preoperative ____________

y. as needed ____________

z. of each ____________

aa. before meals ____________

bb. to ____________

cc. as desired ____________

dd. ampule ____________

ee. water ____________

ff. distilled water ____________

gg. twice a day ____________

hh twice a night ____________

ii. capsule ____________

jj. with ____________

kk. cubic centimeter ____________

ll. compound ____________

mm. discontinue ____________

nn. dram ____________

oo. elixir ____________

pp. enteric coated ____________

qq. extract ____________

rr. iron ____________

ss. fluid ____________

tt. gram ____________

uu. grain ____________

vv. drops ____________

ww. hypodermic ____________

xx. powder ____________

yy. every ____________

zz. every day ____________

TEST

aaa. every hour ________

bbb. four times a day ________

ccc. every other day ________

ddd. quantity sufficient ________

eee. take ________

fff. without ________

ggg. solution ________

hhh. spirit ________

iii. one-half ________

jjj. at once ________

kkk. syrup ________

lll. tablet ________

mmm. three times a day ________

nnn. three times a night ________

ooo. tincture ________

ppp. unit ________

qqq. ointment ________

rrr. wine ________

sss. microgram ________

ttt. milliliter ________

uuu. rectal ________

vvv. subcutaneous ________

www. one ________

xxx. two ________

yyy. three ________

zzz. four ________

aaaa. five ________

bbbb. six ________

cccc. seven ________

dddd. eight ________

eeee. nine ________

ffff. ten ________

(NOTE: Test questions 27 and 28 list assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

27. Use drug information reference.

28. Practice using household, apothecaries', and metric systems.

INTRODUCTION TO PHARMACOLOGY
UNIT I

ANSWERS TO TEST

1. a. 4
   b. 3
   c. 8
   d. 2
   e. 7
   f. 10
   g. 1
   h. 5
   i. 9
   j. 6
   k. 12
   l. 15
   m. 13
   n. 14
   o. 11
   p. 16
   q. 17
   r. 18
   s. 23
   t. 21
   u. 24
   v. 20
   w. 19
   x. 25
   y. 22

2. a. 5
   b. 2
   c. 1
   d. 4
   e. 3
   f. 6
   g. 7
   h. 8
   i. 13
   j. 14
   k. 12
   l. 10
   m. 15
   n. 16
   o. 17
   p. 11
   q. 18
   r. 19
   s. 20
   t. 9

3. a. Diagnosis
   b. Treatment of symptoms
   c. Treatment of diseases or dysfunctions
   d. Prevention of disease

4. a. Animal
   b. Plant
   c. Mineral
   d. Synthetic or chemical

ANSWERS TO TEST

5.

a.	14	i.	6	q.	7	y.	24
b.	18	j.	1	r.	9	z.	26
c.	2	k.	4	s.	19	aa.	25
d.	12	l.	13	t.	21		
e.	11	m.	10	u.	22		
f.	5	n.	8	v.	20		
g.	17	o.	3	w.	27		
h.	16	p.	15	x.	23		

6.

a.	O	e.	T	i.	C
b.	T	f.	O	j.	T
c.	G	g.	G	k.	T
d.	C	h.	G, O, C		

7. Description should include the following

a. Physical examination is made for foreign or extraneous ingredients

b. Chemical analysis is completed on each component in drug

c. When the composition of a drug is unknown, biological assay is made by administering drug to a laboratory animal under controlled environment and studying the effects

d. Clinical assay is permitted using a new drug on human patients in a controlled environment

8. a. *United States Pharmacopeia and National Formulary (USP-NF)*

b. *Nurse's Guide to Drugs*

c. *Physicians' Desk Reference (PDR)*

9.

a.	6	d.	4
b.	2	e.	3
c.	1	f.	5

ANSWERS TO TEST

10. a. Institutional policies vary in the degree of responsibility a nurse is allowed or required to assume

    b. The nurse should never administer medications unless he or she has had a course of study and practical experience

    c. A nurse is responsible for his or her actions and can be held liable for negligent actions or omissions

    d. If the nurse believes that a medication order is incorrect, it is his or her responsibility to bring this to the attention of the person in charge and/or the physician before giving the medication; this information should be documented

    e. A nurse is responsible for his or her actions by carrying out the order of the physician; the nurse will be liable if a questionable order is carried out knowingly

    f. When a nurse performs a task beyond the scope of professional training, he or she may be guilty of malpractice

11. a, b, e, g, h

12. a. A nurse must not suggest or prescribe medications

    b. A nurse should not undermine the patient's faith in the doctor by commenting unfavorably about the orders, but should speak to the physician when recommending changes in therapy

    c. A nurse must know the principal effect, adverse reactions, and compatibilities of medications being given; any unfavorable reaction must be reported and recorded promptly

    d. Nurse must know why a specific drug is given for each patient

    e. The nurse has a responsibility to the patient, the institution, and the physician to give and record the right medication at the prescribed time, and to be aware of the patient's reaction

    f. The nurse has a legal and ethical responsibility to report and record any incorrect medication immediately so that appropriate action can be taken

    g. A nurse must not take medicine which belongs to a patient or the hospital, either for his or her own use or to give to another

    h. All medications should be charted AFTER administration

13. b, d, e, f

ANSWERS TO TEST

14. Description should include the following

    a. Infants and young children

        1) Oral administrations should be in liquid form and can be mixed with small amounts of formula, water, or food

        2) Parenteral administrations should be given in the vastus lateralis site for infants; the gluteus medius site may be used for young children

    b. Children

        1) Oral medications should be liquid or chewable type

        2) Parenteral medications should be administered quickly and efficiently, using someone to hold the child if needed to avoid any sudden movements

    c. Adolescents

        1) Dosage of medication is usually equal to or slightly less that that of an adult

        2) Parenteral medications should not be a problem if patient is treated as an adult

    d. Geriatric patients

        1) Dosage of medications may be somewhat less than that for the young or middle-aged adult

        2) Oral medication in tablet or capsule form may be difficult for the patient to swallow

        3) Parenteral sites must be observed carefully because skin breakdown can occur easily

        4) Observe closely because adverse reactions happen quickly, and combinations of drugs can cause untoward effects

15. Solids

    a. 4
    b. 3
    c. 2
    d. 1
    e. 8
    f. 6
    g. 7
    h. 5
    i. 9

ANSWERS TO TEST

Liquids

a.	2	f.	6
b.	3	g.	10
c.	1	h.	8
d.	5	i.	9
e.	4	j.	7

16.

a.	M	f.	A
b.	A	g.	H
c.	M	h.	M
d.	H	i.	H
e.	A		

17. a. 1) 1 pound, pd, or lb
    2) 1 dr
    3) 1 oz
  b. 1) 1 quart
    2) 1 gallon
    3) 1 fluidounce f ℥ ī
    4) 1 fluidram f ʒ i
    5) 1 pint

18.

a.	3	e.	1
b.	6	f.	8
c.	7	g.	5
d.	2	h.	4

ANSWERS TO TEST

19. a. H
    b. A, H
    c. A, H
    d. A
    e. A
    f. M
    g. A
    h. M
    i. H
    j. A
    k. A
    l. H
    m. M
    n. H
    o. M
    p. A, H
    q. M
    r. M

20. a. gt
    b. kg
    c. oz or ℥
    d. gal
    e. gm
    f. gr
    g. mg
    h. L
    i. c
    j. dr or ʒ
    k. T or tbsp
    l. pd or lb
    m. cc
    n. pt
    o. mcg
    p. t or tsp
    q. qt
    r. ♏
    s. ml

21. a. 0.1 gm
    b. gr 15
    c. 1 tsp
    d. 1 oz ℥i̇
    e. 60 mg
    f. 15 mg
    g. gr 1/6
    h. gr 1/150
    i. 2.2 lb
    j. 15 ♏
    k. 15 gtt
    l. 1 tsp
    m. 15 ml/cc
    n. 8 dr/1 oz
    o. 1 glassful
    p. 500 ml/cc
    q. 4 measuring cups

ANSWERS TO TEST

22. 6 gm x 15 = gr 90

23. gr 45 ÷ 15 = 3 gm

24. a. 0.0006 gm x 1000 = 0.6 mg
    b. .0006 gm = 0.6 mg

25. a. 100 mg ÷ 1000 = 0.1 gm
    b. 0.100 mg = 0.1 gm

26. a. h
    b. hs
    c. IM
    d. IV
    e. L
    f. liq
    g. ♏
    h. mg
    i. mEq
    j. noc, n
    k. non rep
    l. ol
    m. OD
    n. OU
    o. OS
    p. qm
    q. qn
    r. os
    s. oz, ℥
    t. pc
    u. per
    v. po, per os
    w. pil
    x. pre-op
    y. prn
    z. aa
    aa. ac
    bb. ad
    cc. ad lib
    dd. amp
    ee. aq
    ff. aq dist
    gg. bid
    hh. bin
    ii. cap
    jj. $\overline{c}$
    kk. cc
    ll. comp
    mm. DC
    nn. dr, ʒ
    oo. elix
    pp. EC
    qq. ext
    rr. Fe
    ss. Fld
    tt. gm
    uu. gr
    vv. gtt
    ww. H, hypo
    xx. pulv
    yy. $\overline{q}$
    zz. qd
    aaa. qh
    bbb. qid
    ccc. qod
    ddd. qs
    eee. Rx
    fff. $\overline{s}$
    ggg. sol
    hhh. sp
    iii. $\overline{ss}$
    jjj. stat
    kkk. syr

ANSWERS TO TEST

lll. tab

mmm. tid

nnn. tin

ooo. tr, tinc

ppp. u, U

qqq. ung

rrr. vin

sss. mcg

ttt. ml

uuu. R

vvv. sc, subcu

www. I, i

xxx. II, ii

yyy. III, iii

zzz. IV, iv

aaaa. V, v

bbbb. VI, vi

cccc. VII, vii

dddd. VIII, viii

eeee. IX, ix

ffff. X, x

27. Evaluated to the satisfaction of the instructor

28. Evaluated to the satisfaction of the instructor

COMPUTING DOSAGES
UNIT II

UNIT OBJECTIVE

After completing this unit, the student should be able to compute dosages of medications accurately, using basic formulas. This knowledge will be shown by completing assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with computing dosages to their correct definitions.
2. Compute medication dosages.
3. Compute dosages for infants and children.

COMPUTING DOSAGES
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities

   A. Order materials planned to supplement unit.

      1. *Calculate with Care.* Twelve filmstrips and twelve audiocassettes and worksheets for use as a self-study program, color, 1979. Available from J.B. Lippincott Company, Department of Audiovisual Media, Division of Higher Education, East Washington Square, Philadelphia, Pennsylvania 19105.

      2. *Fractions and Decimals.* Filmstrip; review of the arithmetic of fractions, division of fractions, and placement of decimal points in multiplication and division of whole numbers. Available from Trainex Corporation, P.O. Box 116, Garden Grove, California 92642.

   B. Provide students with objective sheet.

   C. Provide students with information and assignment sheets.

   D. Discuss unit and specific objectives.

   E. Discuss information and assignment sheets.

      (NOTE: Use everyday items and recipes to demonstrate proportions and ratios.)

   F. Develop appropriate learning activities for special needs students.

   G. Review basic arithmetic.

      (NOTE: Give a pretest on basic math problems to assess students' needs. If you see they need more assistance in any one area, you can provide extra study materials and guidance in math skills.)

   H. Use games to help students memorize tables of equivalent measures.

   I. Have students practice computing medication dosage, using worksheets and blackboard.

      (NOTE: Teach both methods for figuring dosages and allow students adequate time for practice.)

   J. Give test.

   K. Reteach if necessary.

SUGGESTED ACTIVITIES

II. Instructional materials

  A. Objective sheet

  B. Suggested activities

  C. Information sheet

  D. Assignment sheets

    1. Assignment Sheet #1--Compute Medication Dosages

    2. Assignment Sheet #2--Compute Dosages for Infants and Children

  E. Answers to assignment sheets

  F. Test

  G. Answers to test

III. Unit references

  A. Biller, Jeffrey A., and Andrew M. Yeager. *The Harriet Lane Handbook: A Manual for Pediatrics House Officers*, 9th ed. Chicago: Year Book Medical Publishers, 1981.

  B. Percherer, Angela R., and Suzanne Vertuno. *How To Calculate Drug Dosages*. Oradell, N.J.: Litton Industries, Inc., 1978.

  C. Squire, Jessie, and Bruce Clayton. *Basic Pharmacology for Nurses,* 7th ed. St. Louis: C.V. Mosby Company, 1981.

COMPUTING DOSAGES
UNIT II

INFORMATION SHEET

I. Terms and definitions

A. Ratio--Relationship of one number or amount to another; indicates division

EXAMPLE: The ratio 1:4 means 1 part of 4 parts and may be written as 1/4, or as a decimal fraction 0.25, or percentage 25%.

1:4 = 1/4 = 0.25 = 25%

B. Proportions--Used to express equality between two ratios

EXAMPLE: Equality is indicated by an = or ::

4 is to 5 as 80 is to 100

4:5 = 80:100

4:5 :: 80:100

$4 \div 5 = 80 \div 100$

$4 \div 5 :: 80 \div 100$

II. Computing medication dosages (Assignment Sheet #1)

(NOTE: The desired amount of the drug and the amount of the drug on the label should be of the same measurement system. If not, then you should convert the amount to the same system that is represented on the drug you are to use.)

A. Fraction formula-- $\frac{\text{Dosage Desired}}{\text{Dosage on Hand}} = \frac{\text{Unknown Quantity Desired (X)}}{\text{Known Quantity of Drug on Hand}}$

EXAMPLE: The physician has ordered Terramycin 0.5 gm. On hand you have Terramycin 250 mg tablets.

To find out how many tablets you would give your patient, you must first convert the dosage desired and the dosage on hand to one unit of measurement: 0.5 gm = 500 mg

Then set up your fractional formula:

$$\frac{500 \text{ mg}}{250 \text{ mg}} = \frac{\text{X tablets}}{\text{1 tablet}}$$

$$250\text{ X} = 500$$

X = 2 tablets (patient receives 2 tablets)

INFORMATION SHEET

B. Ratio/proportion formula--Dose on hand : Known amount or solution = Desired dose : X (unknown solution or amount desired)

EXAMPLE: The physican has ordered aspirin gr 10 q 4h prn for pain. On hand you have acetylsalicylic acid (aspirin) gr 5 tablets.

gr 5 : 1 tablet = gr 10 : X tablet(s)

(NOTE: The product of the two outside numbers equals the product of the two inside numbers.)

$5X = 10$

$X = 10 \div 5$ (Change the side and change sign)

$X = 2$ tablets (Patient receives 2 aspirin tablets, gr 5 each, orally every 4 hours when needed or required.)

III. Computing dosages for infants and children (Assignment Sheet #2)

(NOTE: The following rules and laws can be used to assist in determining approximate dosages of drugs. Many physicians will order the drugs from the pharmacist, stating the exact dosages to be given. Package inserts and other drug references are available that give the exact dosage for children, many according to body weight. If you are not sure of a dosage, STOP and ASK for assistance.)

EXAMPLE: The chart on the following page is being used by many physicians and nurses to figure dosages for infants and children, using body weight and surface area. The following formula is based on the chart.

$$\frac{\text{Surface Area of Child}}{\text{Surface Area of Average Adult } (1.7\ m^2)} \times \text{Usual Adult Dosage} = \text{Child's Dosage}$$

The dosages may differ from those computed with traditional rules and laws. Become familiar with your facility's method of computing dosages.

INFORMATION SHEET

Age	Weight		Surface Area (m^2)	Fraction of Adult Dose
	kg	lb		
Birth	2.0	4.4	0.15	0.09
Birth	3.4	7.4	0.21	0.12
3 weeks	4.0	8.8	0.25	0.14
3 months	5.7	12.5	0.29	0.17
6 months	7.4	16	0.36	0.21
9 months	9.1	20	0.44	0.25
1 year	10	22	0.46	0.27
1 1/2 years	11	25	0.50	0.29
2 years	12	27	0.54	0.31
3 years	14	31	0.60	0.35
4 years	16	36	0.68	0.39
5 years	19	41	0.73	0.42
6 years	21	47	0.82	0.47
7 years	24	53	0.90	0.52
8 years	27	59	0.97	0.56
9 years	29	65	1.05	0.61
10 years	32	71	1.12	0.65
11 years	36	78	1.20	0.70
12 years	39	86	1.28	0.74

A. Young's Rule-- $\frac{\text{Age of Child}}{\text{Age of Child} + 12} \times$ Average Adult Dose = Child's Dose

(NOTE: This rule applies to children up to age twelve.)

EXAMPLE: Average dose of phenobarbital is 30 mg. Compute amount to give to a four-year-old.

$$\frac{4}{4+12} \times 30 \text{ mg} = \frac{120}{16}$$

$$= 7\ 1/2 \text{ mg } (1/4 \text{ of adult dose})$$

B. Fried's Law-- $\frac{\text{Age in Months}}{150} \times$ Average Adult Dose = Infant's Dose

(NOTE: This law is applicable only for children up to 24 months.)

EXAMPLE: Average dose of phenobarbital is 30 mg. Compute amount to give to a six-month-old child.

$$\frac{6}{150} \times 30 \text{ mg} = \frac{180}{150}$$

$$= 1\frac{1}{5} \text{ mg}$$

INFORMATION SHEET

C. Clark's Rule-- $\frac{\text{Child's Weight in Pounds}}{150}$ x Average Adult Dose = Child's Dose

(NOTE: This rule is probably the best method to use because the results are the most accurate.)

EXAMPLE: Average dose of phenobarbital is 30 mg. Compute dosage to give to a forty-pound child.

$$\frac{40}{150} \times 30 = \frac{1200}{150}$$

$$= 8 \text{ mg (child's dose)}$$

COMPUTING DOSAGES
UNIT II

ASSIGNMENT SHEET #1--COMPUTE MEDICATION DOSAGES

NAME____ SCORE ____________

One of the most important tasks in administering medications is the accurate computing of drug doses. A standard formula for computation provides an accurate method of determining how much of the medication to administer. Practice using the fraction and ratio formulas below to compute the following dosages. Hand in to instructor for evaluation.

Fraction formula--

$$\frac{\text{Dosage Desired}}{\text{Dosage on Hand}} = \frac{\text{Unknown Quantity Desired (X)}}{\text{Known Quantity of Drug on Hand}}$$

Ratio/proportion formula--

Dose on hand: Known amount or solution = Desired dose: X (unknown or amount desired)

A. The physician orders 0.5 gm of Diamox p.o. You have Diamox 250 mg per tablet. You would give ____________________ tablet (s).

B. The physician's order reads Tylenol elixir 500 mg q 4h. The medication on hand is labeled 1000 mg per 30 ml/cc. You would give ________________ml/cc.

ASSIGNMENT SHEET #1

C. The physician orders streptomycin 0.25 gm. The medication on hand is labeled 500 mg per ml/cc. You would give ____________________ ml/cc.

D. The order reads penicillin 150,000 units (IM) bid. The vial is marked 600,000 units per 1 ml/cc. You would give ____________________ ml/cc.

E. The doctor has ordered chloral hydrate gr xv. The bottle is labeled gr x in ℥i. You would give ________________________ ℥.

F. The doctor orders meperidine hydrochloride 50 mg. The prepared syringe is labeled 100 mg per ml/cc. You would give ____________________ ml/cc.

ASSIGNMENT SHEET #1

G. The doctor orders cortisone acetate 62.5 mg. The dose on hand is a suspension with a label reading 25.0 mg in 1 ml/cc. You would give ____________________ ml/cc.

H. The doctor orders Benadryl 35 mg IM. The dose on hand is contained in a vial labeled 50 mg/ml/cc. You would give ____________________ ml/cc.

I. The order is to give 0.3 gm of potassium iodide. The bottle is labeled gm $\dot{\top}$ in 1 ml/cc. You would give ____________________ ml/cc.

ASSIGNMENT SHEET #1

J. The physician's order reads Taractan liquid 40 mg bid for your patient. On hand you have Taractan liquid 100 mg in 5 ml/cc. You would give ________________ ml/cc.

COMPUTING DOSAGES
UNIT II

ASSIGNMENT SHEET #2--COMPUTE DOSAGES FOR INFANTS AND CHILDREN

NAME____ SCORE ____________

Standard formulas to compute children's medication dosages provide an accurate method of determining correct amounts of drugs to give. Compute the dosages in the following problems, using one of the formulas for children's dosages. State the name of the formula you used for each problem. Hand in assignment to instructor for evaluation.

A. The adult dosage is 15 gtt. What is the dose for a three-year-old child?

1. Formula used____

2. Dose____

B. The adult dose is 1 gm. How many milligrams should be given to a ten-month-old child?

1. Formula used____

2. Dose____

ASSIGNMENT SHEET #2

C. The adult dose is 50 mg. How much would be given to a twenty-five-pound child?

1. Formula used____
2. Dose____

D. If the adult dose is gr 1/2, how many milligrams would be given to a nine-month-old infant? (gr 1/2 = 30 mg)

1. Formula used____
2. Dose____

E. The adult dose is ʒ$\overline{\dot{\imath}\dot{\imath}}$. How many ml/cc should be given to a twenty-pound infant? (1 dram = 5 ml/cc)

1. Formula used____
2. Dose____

ASSIGNMENT SHEET #2

F. The average adult dose is 2 mg. Compute the dose for an eight-year-old child.

1. Formula used____

2. Dose____

COMPUTING DOSAGES
UNIT II

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1

(NOTE: Two ways are given to solve each problem.)

A. 1. $\frac{0.5 \text{ gm}}{250 \text{ mg}} = \frac{X \text{ tablets}}{1 \text{ tablet}}$

(250 mg = 0.250 gm)

$\frac{0.5 \text{ gm}}{0.25 \text{ gm}} = \frac{X \text{ tablets}}{1 \text{ tablet}}$

$0.25 X = 0.5$
$X = 2$ tablets

2. 250 mg : 1 tablet = 0.5 gm : X tablets
250 mg = 0.250 gm

0.25 gm : 1 tablet = 0.5 gm : X tablets

$0.25 X = 0.5$
$X = 2$ tablets

B. 1. $\frac{500 \text{ mg}}{1000 \text{ mg}} = \frac{X \text{ ml/cc}}{30 \text{ ml/cc}}$

$1000 X = 15{,}000$

$X = 15$ ml/cc

2. 1000 mg : 30 ml/cc = 500 mg: X ml/cc

$1000 X = 1500$

$X = 15$ ml/cc

C. 1. $\frac{0.25 \text{ gm}}{500 \text{ mg}} = \frac{X \text{ ml/cc}}{1 \text{ ml/cc}}$

0.25 gm = 0.250 mg

$\frac{250 \text{ mg}}{500 \text{ mg}} = \frac{X \text{ ml/cc}}{1 \text{ ml/cc}}$

$500 X = 250$
$X = 0.5$ ml/cc or 1/2 ml/cc

ANSWERS TO ASSIGNMENT SHEETS

2. 500 mg : 1 cc = 0.25 gm : X ml/cc

0.25 gm = 0.250 mg

500 mg : 1 ml/cc = 250 mg : X ml/cc

500 X = 250
X = 0.5 ml/cc or 1/2 ml/cc

D. 1. $$\frac{150{,}000\ \text{U}}{600{,}000\ \text{U}} = \frac{X\ \text{ml/cc}}{1\ \text{ml/cc}}$$

600,000 X = 150,000
X = 0.25 ml/cc

2. 600,000 U : 10 ml/cc = 150,000 U : X

600,000 X = 150,000
X = 0.25 ml/cc

E. 1. $$\frac{\text{gr } 15}{\text{gr } 10} = \frac{X\ \text{ʒ}}{\text{ʒi}}$$

10 X = 15
X = 1.5 ʒ or ʒiss

2. gr 10 : ʒi = gr. 15 : X ʒ

10 X = 15
X = 1.5 ʒ or ʒiss

F. 1. $$\frac{50\ \text{mg}}{100\ \text{mg}} = \frac{X\ \text{ml/cc}}{1\ \text{ml/cc}}$$

100 X = 50
X = 0.5 ml/cc or 1/2 ml/cc

2. 100 mg : 1 ml/cc = 50 mg : X ml/cc

100 X = 50
X = 0.5 ml/cc or 1/2 ml/cc

G. 1. $$\frac{62.5\ \text{mg}}{25.0\ \text{mg}} = \frac{X\ \text{ml/cc}}{1\ \text{ml/cc}}$$

25.0 X = 62.5
X = 2.5 ml/cc or 2 1/2 ml/cc

2. 25.0 mg : 1 ml/cc = 62.5 mg : X ml/cc

25.0 X = 62.5
X = 2.5 ml/cc or 2 1/2 ml/cc

ANSWERS TO ASSIGNMENT SHEETS

H. 1. $\frac{35 \text{ mg}}{50 \text{ mg}} = \frac{X \text{ ml/cc}}{1 \text{ ml/cc}}$

$50\,X = 35$
$X = 0.7$ ml/cc

2. $50 \text{ mg} : 1 \text{ ml/cc} = 35 \text{ mg} : X \text{ ml/cc}$

$50\,X = 35$
$X = 0.7$ ml/cc

I. 1. $\frac{0.3 \text{ gm}}{1 \text{ gm}} = \frac{X \text{ ml/cc}}{1 \text{ ml/cc}}$

$1\,X = 0.3$
$X = 0.3$ ml/cc

2. $1 \text{ gm} : 1 \text{ ml/cc} = 0.3 \text{ gm} : X \text{ ml/cc}$

$1\,X = 0.3$
$X = 0.3$

J. 1. $\frac{40 \text{ mg}}{100 \text{ mg}} = \frac{x \text{ ml/cc}}{5 \text{ ml/cc}}$

$100\,X = 200$
$X = 2$ ml/cc

2. $100 \text{ mg} : 5 \text{ ml/cc} = 40 \text{ mg} : X \text{ ml/cc}$

$100\,X = 200$
$X = 2$ ml/cc

Assignment Sheet #2

A. 1. Young's Rule

2. $\frac{3}{3 + 12} \times 15 \text{ gtts} = \frac{\overset{1}{\cancel{3}}}{\underset{5}{\cancel{15}}} \times 15$

$= 3$ gtt

B. 1. Fried's Law

2. $\frac{10}{150} \times 1 \text{ gm} = \frac{1}{15}$ of 1 gm

$= \frac{1}{15}$ of 1000 mg

$= 66\frac{2}{3}$ mg

ANSWERS TO ASSIGNMENT SHEETS

C. 1. Clark's Rule

2. $\frac{25}{150} \times 50 \text{ mg} = \frac{\overset{1}{\cancel{25}}}{\underset{6}{\cancel{150}}} \times 50$

$= \frac{50}{6}$

$= 8\frac{1}{3} \text{ mg}$

D. 1. Fried's Law

2. $\frac{9}{150} \times 30 \text{ mg} = \frac{9}{\underset{5}{\cancel{150}}} \times \frac{\overset{1}{\cancel{30}}}{1}$

$= \frac{9}{5}$

$= 1\frac{4}{5} \text{ mg}$

$= 1.8 \text{ mg}$

E. 1. Clark's Rule

2. $\frac{20}{150} \times 10 \text{ ml} = \frac{20}{150} \times \frac{10}{1}$

$= \frac{20}{15}$

$= 1\frac{1}{3} \text{ ml/cc}$

F. 1. Young's Rule

2. $\frac{8}{8 + 12} \times 2 \text{ mg} = \frac{\overset{2}{\cancel{8}}}{\underset{5}{\cancel{20}}} \times 2$

$= \frac{4}{5} \text{ mg}$

COMPUTING DOSAGES
UNIT II

TEST

NAME______________________________________ SCORE ____________

1. Match terms associated with computing dosages to their correct definitions. Write the correct numbers in the blanks.

_____a. Relationship of one number or amount to another; indicates division	1. Ratio
_____b. Used to express equality between two ratios	2. Proportions

2. Compute medication dosages. Use both the fraction and the ratio/proportion formulas. Show all work.

   The physician orders 500 mg of ampicillin. You have on hand 0.25 gm per tablet of ampicillin. You would give ____________________ tablet (s).

3. Compute dosages for infants and children. Use the formulas indicated. Show all work.

   a. Physician orders Gantrisin suspension ________ gm q 4h. The adult dose is 1 gm q 4 hrs. The child is eight years old.

   Using Young's Rule, you would give ____________________.

TEST

b. Give Demerol _______ mg q 4h prn. The adult dose is 50-100 mg q 4h. The child is a four-month-old baby weighing ten pounds.

Using Clark's Rule, you would give ____________________________.

c. Give aspirin gr ________ q 4h. The adult dose is gr 5-10 q 4h. The child is a one-year-old infant.

Using Fried's Rule, you would give ____________________.

COMPUTING DOSAGES
UNIT II

ANSWERS TO TEST

1. a. 1

   b. 2

2. a. $\frac{500\text{ mg}}{0.25\text{ gm}} = \frac{X\text{ tablets}}{1\text{ tablet}}$

   $500\text{ mg} = 0.500\text{ gm}$

   $\frac{0.5\text{ gm}}{0.25\text{ gm}} = \frac{X\text{ tablets}}{1\text{ tablet}}$

   $0.25\,X = 0.5$
   $X = 2\text{ tablets}$

   b. $0.25\text{ gm} : 1\text{ tablet} = 500\text{ mg} : X\text{ tablets}$

   $500\text{ mg} = 0.500\text{ gm}$

   $0.25\text{ Gm} : 1\text{ tablet} = 0.5\text{ gm} : X\text{ tablets}$

   $0.25\,X = 0.5$
   $X = 2\text{ tablets}$

3. a. $\frac{8}{8+12} \times 1\text{ gm} = \frac{8}{20}$

   $= \frac{2}{5}$ or 0.4 gm

   b. $\frac{10}{150} \times 50\text{ mg} = 3.3\text{ mg}$

   c. $\frac{12}{150} \times \text{gr } 5 = \text{gr } \frac{60}{150}$

   $= \text{gr } \frac{2}{5}$

   $= \text{gr } \frac{4}{10}$

   $= \text{gr } 0.4$

CLASSIFICATION AND EFFECTS OF DRUGS
UNIT III

UNIT OBJECTIVE

After completing this unit, the student should be able to classify different groups of drugs according to their effects on the body systems. This knowledge will be shown by completing the assignment sheet and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with the classification and effects of drugs to their correct definitions.
2. List purposes for which drugs are given.
3. Match therapeutic purposes of drugs to their correct actions
4. List patient factors which influence selection of medications.
5. Describe drug factors which influence selection of medications.
6. Match types of drug actions to their correct descriptions.
7. Describe the primary effects of drugs on major centers of the central nervous system.
8. Match groups of drugs that affect the central nervous system to their correct actions.
9. Describe actions of groups of drugs that affect the autonomic nervous system.
10. Match common groups of drugs that affect the eye to their correct actions.
11. Describe groups of drugs that affect the cardiovascular system.
12. State important facts related to giving a digitalis drug.
13. State information that should be given to patients receiving antihypertensive drugs.
14. Match groups of drugs that affect the respiratory system to their correct actions.
15. Describe actions of drugs that affect the digestive system.
16. Complete a chart showing groups of drugs that affect the reproductive system.
17. Describe common groups of drugs that affect the muscular system.

OBJECTIVE SHEET

18. Match groups of drugs that affect the urinary system to their correct actions.
19. Describe actions of groups of drugs that affect the endocrine system.
20. Complete charts of information related to forms of insulin and oral hypoglycemic agents.
21. Match groups of antineoplastic treatments to their correct actions.
22. Describe nursing care specific to patients receiving antineoplastic drugs.
23. Match antimicrobial drugs to their correct descriptions.
24. List common serums and vaccines.
25. List major groups of drugs commonly abused.
26. Make drug cards and filing system.

CLASSIFICATION AND EFFECTS OF DRUGS
UNIT III

SUGGESTED ACTIVITIES

I. Suggested activities

A. Order materials planned to supplement unit.

1. Filmstrips

a. *Antibiotics*

b. *Anticoagulants*

c. *Antihistimine Drugs*

d. *Antihypertensives*

e. *Barbiturate Drugs*

f. *Cancer Chemotherapy*

g. *Cardiac Glycosides and Quinidine Derivatives*

h. *Digitalis*

i. *Diuretics*

j. *Heparin Sodium and Warfarin Sodium*

k. *Drugs: From Research to Your Patient*

(NOTE: All filmstrips listed above available from Trainex Corporation, P.O. Box 116, Garden Grove, California 92642.)

2. *Drugs: Action and Interaction.* Set of six filmstrips and workbooks covers topics that concern the administration and absorption of oral, injectable, noninjectable, and intravenous drugs; distribution and action; and biotransformation and excretion of drugs. Available from Concept Media, P.O. Box 19542, Irvine, California 92714.

B. Provide students with objective sheet.

C. Provide students with information and assignment sheets.

D. Discuss unit and specific objectives.

E. Discuss information and assignment sheets.

F. Provide students with examples of current drugs for classification of drugs that have not been given.

(NOTE: New drugs are put on the market daily. Rather than date this material, examples of various classes should be given by the instructor, giving the most current and readily available drugs.)

SUGGESTED ACTIVITIES

G. Develop appropriate learning activities for special-needs students.

H. Invite pharmacist to speak on classes of drugs, actions, and new drugs available.

(NOTE: The pharmacist will be an excellent resource person from whom to obtain information, free pamphlets, package inserts from drug containers, and other valuable teaching items.)

I. Make posters showing the different classifications of drugs, using pictures, package inserts, and other information.

J. Have available for students' use drug-reference sources such as *Facts and Comparisons*, *Nursing Guide to Drugs*, and others.

K. Make samples of drug cards for a bulletin board display.

L. Give test.

(NOTE: Because of the amount and importance of the information in this unit, it may be advisable to break test into sections to administer.)

M. Reteach if necessary.

II. Instructional materials

A. Objective sheet

B. Suggested activities

C. Information sheet

D. Assignment Sheet #1–Make Drug Cards and Filing System

E. Answers to assignment sheet

F. Test

G. Answers to test

III. Unit references

A. Rosdahl, Caroline Bunker. *Textbook of Basic Nursing*, 3rd ed. Philadelphia: J.B. Lippincott Company, 1981.

B. Squire, Jessie E., and Bruce D. Clayton. *Basic Pharmacology for Nurses*, 7th ed. St. Louis, Missouri: The C.V. Mosby Company, 1981.

CLASSIFICATIONS AND EFFECTS OF DRUGS
UNIT III

INFORMATION SHEET

I. Terms and definitions

A. Therapeutic--Having medicinal or healing properties

B. Local effect--Limited to one part or place

C. Systemic effect--Generalized or affecting entire body

D. Contraindication--Any symptom or circumstance indicating inappropriateness of a form of treatment otherwise advisable

E. Chemotherapy--Application of chemical reagents which have specific and toxic effects upon disease-causing microorganisms

F. Absorption--Process by which drug is made available to body fluids to be distributed

(NOTE: The rate of absorption depends on the physical properties of the drug, the route of administration, and the patient's condition.)

G. Anaphylaxis--Serious, generalized reaction brought about by the administration of an allergen such as a drug or serum; usually occurs rapidly and can be fatal unless immediate emergency measures are taken

H. Drug addiction--Acquired dependence upon narcotics or other drugs which stimulate or depress physiologic or mental activites

I. Habituation--Acquired tolerance from repeated use of a drug with little or no tendency to increase the dose

(NOTE: When drug is discontinued, patient can experience a desire or craving for drug.)

J. Tolerance--Ability to endure without ill effect, such as the continued use or increasing use of a drug

(NOTE: An *acquired tolerance* means that there is an increased resistance to the usual effects of a drug. A patient who has been taking a specific antibiotic for some time may build up a tolerance to that drug and find it is no longer effective for the condition being treated.)

K. Initial dose--First dose given

(NOTE: The initial dose of a drug may be slightly stronger to more quickly build a blood level of the specific drug. This dosage may be altered to a lower strength as a maintenance dose that maintains a certain blood level.)

L. Average or usual dose--Quantity of drug which will usually provide or produce the therapeutic effect for which it is being administered

INFORMATION SHEET

M. Lethal dose--One which causes death

N. Injection--Introduction of a fluid substance into a body, into a vessel or cavity, under the skin, or into a muscle

O. Parenteral injection--Introduction of substances into body through any route other than through alimentary canal

EXAMPLES: Subcutaneous, intravenous, intramuscular, or intradermal

P. Infusion--Slow injection of a solution into a vein or into body tissue

Q. Inunction--Ointment or medicated substance rubbed into skin to obtain a local or systemic effect

R. Instillation--Introduction of a liquid into a body cavity

S. Sublingual--Beneath the tongue

T. Intradermal--Within the skin

U. Hypodermoclysis--Introduction of large quantities of fluid into subcutaneous tissues

V. Intraperitoneal--Within the peritoneum or peritoneal cavity

W. Intracardial--Within the heart

X. Intrapleural--Within the pleura or pleural cavity

Y. Intrathecal--Within the spinal canal

Z. Diabetes mellitus--Condition characterized by inadequate supply of insulin

AA. Insulin--Substance secreted by islets of Langerhans of the pancreas that aids body in storing and using sugar

BB. Neoplastic--Pertaining to the nature of new abnormal tissue formation

II. Purposes for which drugs are given (Assignment Sheet #1)

(NOTE: Drugs are given with definite goals in mind. They are given to reach the entire circulation and affect the whole body, or to reach a specific organ or place to bring about a therapeutic effect at the site of action.)

A. Prevention or prophylaxis

(NOTE: Drugs are given to prevent the occurrence of a disease or to lessen its severity if it does occur.)

B. Diagnosis

C. Therapeutic action

INFORMATION SHEET

III. Therapeutic purposes of drugs and their actions

A. Curative--To cure a specific disease

B. Palliative or symptomatic--To relieve symptoms; help patient feel better

C. Supportive--To sustain patient until natural resistance overcomes illness or until other measures can be instituted

D. Substitutive--To replace substances usually found in the body; may be temporary or permanent replacement

E. Restorative--To assist in the healing process

F. Prophylactic--To prevent disease from occuring

IV. Patient factors which influence selection of medications

A. Age, sex, and weight

(NOTE: Adult dose is based upon the average weight of a man, 150 pounds. Alteration of this dose may be necessary.)

B. Physical condition

(NOTE: Dosages may need to be increased in a severe illness. In certain conditions, a particular drug may be contraindicated. For instance, many drugs should not be taken during pregnancy.)

C. Tolerance

(NOTE: When a drug has been taken over a period of time, tolerance to its effect may develop, making increased dosage or change of medication necessary.)

D. Idiosyncrasy of effect

(NOTE: Idiosyncrasy of effect occurs when dosages of a drug that have known and predictable effects cause toxic or opposite effects, or no effect. Reactions to drugs may vary from mild, with minimal discomfort, to a severe or fatal reaction, anaphylaxis.)

E. Hypersensitivity to drug

(NOTE: When hypersensitivity occurs, the body reacts to an agent more strongly than it normally would.

F. Occupation

(NOTE: Physically active persons may require larger or more frequent doses of medication to attain the desired effects.)

INFORMATION SHEET

V. Drug factors which influence selection of medications

  A. Purpose of drug

    1. Influences time of dosage

    2. Influences amount and method of administration

  B. Nature and form of drug

    1. Physical and chemical properties of drug determine method of administration

    2. Nature and form of drug may determine area where drug is administered

  C. Rate of absorption and excretion

    1. Some drugs are absorbed and excreted rapidly and have a fleeting effect

    2. Other drugs are excreted slowly and can have a cumulative effect

  D. Rate and amount of metabolism

    1. Some drugs must be changed by the body into different substances to be effective or to be excreted

       (NOTE: The liver aids in detoxifying some drugs.)

    2. Some drugs are active as they are ingested

  E. Excretion of drug

    1. Drugs may be eliminated by kidneys, skin, lungs, alimentary canal, and mucous membranes

    2. When a particular excretory function is impaired, some drugs must be avoided or be given in smaller dosages to be excreted by that system

  F. Possibility of addiction

    1. Medications that can become addictive should be used cautiously

    2. Other drugs may need to be substituted

  G. Drug combinations and interactions

    1. Drugs may increase or decrease the actions of each other

    2. Nurses should know what drugs patients are taking before administering new medications

       EXAMPLES: Aspirin increases the effect of an anticoagulant; phenobarbital decreases the effect of some anticoagulants

INFORMATION SHEET

H. Method of administration

1. Rate of absorption is directly related to method of administration

2. Medications given intravenously are rapidly absorbed and may be given in smaller dosages, whereas rectal medications are absorbed slowly and must be given in larger dosages

I. Time of administration

1. Time of administration may alter effect of drug

2. Purpose of drug should be considered when time of administration is determined

EXAMPLES: Hypnotics are usually given at bedtime; diuretics are given early in the day to avoid interrupting patient's sleep with urinary frequency.

J. Dosage of medication

1. Doses of different levels may have different effects

2. Purpose of drug is considered in determining dosage

EXAMPLES: Small doses of atropine slow the heart rate; larger doses increase the rate.

VI. Types of drug actions and their descriptions

A. Depressant--Slows activity of body systems or organs

B. Stimulant--Speeds activity of body systems or organs

C. Irritant--Causes excessive cell activity; prolonged irritation depresses activity

D. Demulcent or emollient--Coats and protects tissues

E. Selective--Has power to act on a certain part of the body

F. Principal effect--Therapeutic action most desired

G. Side effect--Action of a drug other than the main effect for which drug is given

H. Untoward--Harmful

I. Cumulative--Tendency to accumulate in system due to slow excretion; may be desired or undesired

J. Antagonistic--Opposite or counteraction of one drug to another

K. Synergistic--Increase in potency or decrease of side effects due to the working together of two drugs

INFORMATION SHEET

L. Additive--Increases effectiveness by combining drug with one or more additional drugs

VII. Primary effects of drugs on major centers of the central nervous system

(NOTE: Drugs may be used to increase or decrease the activity of nerve centers and the conducting pathways. Drugs to stimulate and depress the brain, spinal cord, or other specific centers have been developed.)

A. Cerebral cortex

1. Depressants decrease sharpness of sensation and perception, slow motor activity, decrease mental alertness, and may promote sleep

2. Stimulants cause increased awareness, sharper impulses and sensations, increased muscle activity, and may cause restlessness

B. Thalamus and hypothalamus

(NOTE: The thalamus is the center for responses to sensations of pain, crude touch, and temperature. The hypothalamus regulates water balance and carbohydrate and fat metabolism, and may be the center for sleep.)

1. Depressants depress cells in various parts of the thalamus, may interrupt impulses to the cerebral cortex, and relieve pain

2. Drugs that depress areas in the hypothalamus may produce sleep; other drugs affect the heat-regulating center

C. Spinal cord and reticular formation

1. Large doses of spinal stimulants may cause convulsions

2. Depressants on the reticular formation may cause sedation and loss of consciousness

VIII. Groups of drugs that affect the central nervous system and their actions

A. Amphetamines--Stimulate the central nervous system, give a feeling of well-being, lessen fatigue, and increase alertness and concentration

(NOTE: Amphetamines are used for short-term treatment of obesity, narcolepsy, and minimal brain dysfunction in children. They have a high potential for abuse.)

B. Hypnotics--Produce sleep

C. Sedatives--Allay activity and excitement

D. Barbiturates--Depress the sleep center, but act on many different levels depending on dose of drug; may potentiate central nervous system depressant effects of other drugs

(NOTE: Barbiturates may be used as preanesthetic medications, to aid in sleep, to overcome anxiety and nervous tension, and to control some convulsive states.)

INFORMATION SHEET

E. Benzodiazepines--Sedatives used in the treatment of anxiety and tension and some psychological disorders

EXAMPLE: Librium

F. Alcohol--Produces progressive and continuous depression of the central nervous system (CNS)

G. Tricyclic antidepressants--Act as mood elevators; have mild tranquilizing effects

H. Anticonvulsants--Treat seizure activity

I. Tranquilizers--Suppress anxiety and modify behavior

J. Analgesics--Relieve pain without producing unconsciousness

(NOTE: There are nonsynthetic narcotic analgesics and synthetic narcotic analgesic drugs. Some analgesics are non-narcotic.)

EXAMPLES: Nonsynthetic: Opium, morphine sulfate
Synthetic: Meperidine hydrochloride
Non-narcotic: Acetaminophen

K. Salicylates--Used as analgesics, antipyretics, and anti-inflammatory agents

EXAMPLE: Asprin (Acetylsalicylic acid)

IX. Actions of groups of drugs that affect the autonomic nervous system

(NOTE: The autonomic nervous system is actually made up of the sympathetic nervous system and the parasympathetic nervous system. These systems control the involuntary body functions such as the glands, smooth muscle tissue, and the heart. The autonomic nervous system's responses are influenced by various hormones and substances that are manufactured in the body and act automatically. Many drugs affect these responses and will alter the natural action.)

A. Catecholamines

(NOTE: This group of drugs includes epinephrine, norepinephrine, and chemicals that occur naturally in the body.)

1. Epinephrine speeds heart rate, raises blood pressure, constricts surface blood vessels, and relaxes smooth muscles in the respiratory tract

(NOTE: Epinephrine is used in the treatment of acute attacks of bronchial asthma and allergic reactions. It is used in treatment of some heart conditions and is so powerful that, when the heart stops beating, it is injected directly into the heart muscle or nearby veins.)

INFORMATION SHEET

2. Norepinephrine constricts blood vessels, speeds heart rate, and helps to maintain blood pressure

3. Catecholamines are destroyed by digestive enzymes, so are given only in injectable forms

4. Vital signs, especially blood pressure, must be monitored frequently when this group of drugs is given

B. Cholinergic agents

1. Produce effects similar to those of acetylcholine, a natural body substance that acts to slow the heart; increase gastric peristalsis and secretion; and increase contractions of the skeletal muscles and the urinary bladder

2. Act to stimulate salivation, lower intraocular pressure in glaucoma, and stimulate intestines and bladder postoperatively

C. Anticholinergic agents

1. Block the effects of acetylcholine

2. Are used in treatment in other body systems because of the effects produced

EXAMPLES: Atropine is used to decrease secretions of the mucous membranes.
Donnatal is used as a gastrointestinal (GI) antispasmodic drug.

X. Common groups of drugs that affect the eye and their actions

(NOTE: Many drugs have been developed for use in the treatment of the eyes. Antiseptics, antibiotics, anesthetics, and steroid preparations have been made specifically to use in the eye. The most important consideration to remember when administering eye medications is to use aseptic technique. An infection of the eye can be quite dangerous and can result in the loss of vision.)

A. Cholinergic agents--Produce strong contractions of the iris and ciliary body muscles and lower the intraocular pressure by widening the filtration angle that will permit the release of aqueous humor

(NOTE: Make sure any drug that you use for the eye is clearly marked "for ophthalmic use" before you administer.)

B. Anticholinergic agents--Produce relaxation of the smooth muscle of the ciliary body and iris, causing dilation of the pupil

(NOTE: These are the drugs ophthalmologists use when examining the eyes; they are also used in treatment when the uveal tract is inflamed and needs rest.)

INFORMATION SHEET

C. Adrenergic agents--Produce pupil dilation, increased release of aqueous humor, vasoconstriction, relaxation of the ciliary muscle, and decrease in formation of aqueous humor

D. Osmotic agents--Produce an elevation of the osmotic pressure of the plasma that causes fluid from extravascular spaces to be drawn into blood, causing a decrease in intraocular pressure

(NOTE: These drugs can be administered intravenously, orally, or topically. They are used in a number of conditions where intraocular pressure can be damaging, such as glaucoma, retinal detachment, or before a cataract extraction or keratoplasty.)

XI. Groups of drugs that affect the cardiovascular system

A. Anticoagulants

1. Prevent or delay coagulation of blood by altering the formation of prothrombin, a substance that is produced by the body to aid in clotting of blood
2. Are used in patients who are suffering from diseases or conditions that cause intravascular clotting
3. Could cause abnormal bleeding from injuries--even minor ones--so patients must be very careful while taking these drugs

EXAMPLES: Heparin, Coumadin® Dicumarol®

B. Coagulants

1. Promote clotting of the blood or hasten the natural clotting process; also known as *hemostatics*
2. Are used in patients who have a deficiency of prothrombin, in special hemorrhagic conditions, and in special forms for patients who may have excess bleeding during surgery

C. Vasodilators

(NOTE: Vasodilators are used in the treatment of angina pectoris, a condition caused by an overload on the heart and inadequate oxygen. The pain radiates from the chest to one or both arms and sometimes to the jaw. The drugs work to relax the muscles of the abdomen, which causes a pooling effect and reduces the amount of blood going back to the heart, reducing the work load of the heart.)

1. Produce dilation of blood vessels and aid in lowering blood pressure
2. Are used in patients with hypertension, peripheral vascular disease, and a number of cardiovascular conditions

INFORMATION SHEET

D. Vasoconstrictors

1. Produce constriction of blood vessels by causing contraction of muscle fibers of the walls of blood vessels, or by stimulating the vasomotor center in the medulla
2. Are used to stop minor hemorrhages, relieve nasal congestion, and raise blood pressure

E. Antihypertensive agents

(NOTE: Hypertension is a condition caused by an elevation of the blood pressure. Primary hypertension is not curable but is controllable with appropriate treatment. Secondary hypertension may be caused by other conditions, such as renal, endocrine, or other secondary disorders.)

1. Sympathetic nervous system inhibitors are agents that reduce blood pressure by acting on the central nervous system
2. Direct vasodilators are used to lower blood pressure directly by dilating the vessels
3. Diuretics cause sodium excretion and vasodilation of peripheral arterioles and cause volume decrease of fluid; are usually used in combination with other antihypertensive agents

F. Digitalis agents

(NOTE: This group of drugs is one of the most effective for treating congestive heart failure. They can also be dangerous to the health of the patient if not used properly and if not given close monitoring.)

1. Digitalis agents reduce systemic and pulmonary congestion; slow and strengthen the heart by assisting the ventricles to empty and fill more completely
2. Patients are given a "digitalizing dose" to treat the acute congestion problem and then are put on a "maintenance dose"

G. Antiarrhythmic agents

(NOTE: Arrhythmias are irregular heart actions that may be caused by physiological or pathological disturbances of the discharge of cardiac impulses by the SA node or transmission through the tissue that conducts impulses.)

1. Agents used will depend on the arrhythmia involved and the conduction problem
2. Many have blocking agents that inhibit the action of substances that stimulate conduction impulses
3. Other drugs act directly on the muscles of the heart to decrease irritability and slow the action of conduction impulses

INFORMATION SHEET

XII. Important facts related to giving a digitalis drug

A. Agents are cumulative, and patients may experience toxicity reactions if not carefully monitored

B. Nurses need to be aware of the symptoms of toxicity, such as patient complaints of headaches, vision disturbances, weakness, nausea, vomiting, and diarrhea

C. Pulse rates should be monitored closely because the drug causes a slowing of the heart rate; apical pulse should be taken before administration of the drug, and drug should be withheld if pulse is below sixty beats per minute; physician should be notified and facts should be documented

(NOTE: It is more accurate to take an apical pulse than a radial pulse.)

D. Nurses need to check dosages and labels very carefully before administering these drugs

(CAUTION: Never give a drug or dosage you are not sure of. Stop and ask for assistance if you need help.)

XIII. Information that should be given to patients receiving antihypertensive drugs

A. An explanation of hypertension and how it affects blood pressure, heart, kidneys, and brain should be given to the patient in terms he or she can understand

B. Each drug and the combined effects of other drugs should be explained to the patient

C. Diet habits will need to be evaluated and regulated, with a decrease in sodium and a reduction of weight if needed

D. Exercise, relaxation, reduction or elimination of cigarette smoking, and regular times for a hobby should be discussed with the patient to assist him or her to begin a more restful and less stress-filled lifestyle

E. Drug therapy may affect patient's sexuality

EXAMPLE: Impotence in males

XIV. Groups of drugs that affect the respiratory system and their actions

(NOTE: Nebulization is a method of treatment for the respiratory system. The administration of mist droplets mixed with the appropriate medication can be given to the patient to be inhaled through the respiratory tract. Antibiotics, bronchodilators, mucolytic drugs, and steroids can be given in this method.)

A. Bronchodilators--Adrenergic or sympathomimetic agents that relax the smooth muscle of the tracheobronchial tree and promote an increase in the opening size to allow freer air flow; also, decrease congestion by vasoconstriction and by reducing swelling of mucous membranes

INFORMATION SHEET

B. Mucolytic agents--Liquefy pulmonary secretions and facilitate removal of these secretions by coughing, postural drainage, or suction

C. Antitussives--Reduce irritation and relieve coughing when it is non-productive

(NOTE: Antitussives may be narcotic or non-narcotic and should not be given when retention of secretions would be harmful to the patient.)

D. Demulcents--Sticky substances that are used to protect the lining of the respiratory tract from irritations; are used to combine with other drugs used for the respiratory tract

E. Expectorants--Reduce viscosity of mucus or increase the productivity of secretions and aid in expulsion of mucus

F. Decongestants (nasal)--Aid in shrinking engorged mucous membranes in nose and relieve nasal stuffiness

(CAUTION: Overuse and abuse may lead to swelling of the mucous membranes, and the nose can feel even more stuffy and congested.)

G. Antihistamines--Act to prevent histamines from acting as a vasodilator

(NOTE: There is much controversy as to whether antihistamines are very effective in treating symptoms of colds and allergies. Over-the-counter products used to an excess may have damaging effects such as urinary retention and constipation.)

XV. Actions of drugs that affect the digestive system

A. Antacids

1. Act by lowering the acidity of gastric secretions by buffering hydrochloric acid

2. Are used to treat heartburn and peptic ulcer disease; long-term usage may mask symptoms of serious underlying disease, so use should be monitored

B. Digestants

1. Digestants aid digestion by supplementing deficiencies of the gastrointestinal tract

2. Various agents are given to supply needed gastric substances, like hydrochloric acid, acidulin, pepsin, and bile salts

C. Emetics

1. Emetics are used to induce vomiting, especially in an emergency when quick emptying of the stomach is needed

2. Ipecac syrup is the only emetic used today and must be used only for the conscious patient

INFORMATION SHEET

D. Antiemetics

1. Antiemetics are used to relieve symptoms of nausea and vomiting

2. Drug used depends on primary reason for symptoms; conditions may require nervous-system depressants, antihistamines, or tranquilizers

E. Cathartics

1. Cathartics may be used as laxatives or purgatives, depending on the need, dosage, and type

   (NOTE: Laxatives cause few bowel movements, whereas purgatives produce several bowel movements and may produce side effects such as cramping, liquid stools, and dehydration.)

2. Drugs are classified according to their method of action, such as bulk-producing, irritant, lubricant, fecal softeners, and saline cathartics

3. Laxatives should not be taken routinely, as the chronic use of cathartics is habit-forming

F. Diagnostic agents

1. Diagnostic agents are used for various gastrointestinal diagnostic procedures

2. Most common agent is barium sulfate, used to assist in viewing of the GI tract by X ray because barium is impermeable to the rays and may be seen as a milky shadow

3. Another common agent is diagnex blue, used to detect gastric anacidity

4. A group of drugs used to determine acidity would be the histamines

G. Antidiarrheics

(NOTE: it is important to find, if possible, the cause of the diarrhea before treating it with the antidiarrhea agent.)

1. Antidiarrheics are grouped into antiperistaltic agents, demulcents, and absorbents

2. Actions range from soothing the GI tract, to coating the tract, to relief of painful muscle spasms

INFORMATION SHEET

XVI. Groups of drugs that affect the reproductive system

Drug	Action	Uses
Oxytocics EXAMPLES: Ergot, Oxytocin	Increase uterine contractions	Stimulate contractions during labor
Uterine contractions inhibitors EXAMPLE: Terbutaline sulfate	Slow or control uterine motility by acting on the CNS or as muscle relaxants	Inhibit contractions during premature labor
Estrogens (follicular hormones) EXAMPLES: Premarin, Stilbestrol	Ovarian secretions responsible for development and maintenance of reproductive organs	Assist in controlling functional uterine bleeding, failure of ovary development, and supression of lactation in postpartum patients Given to some males with cancers of the reproductive organs as palliative measures
Progesterone (luteal hormones) EXAMPLE: Norlutin	Corpus luteum secretions that aid in preparing the uterine and ovarian conditions during pregnancy	Used to treat menstrual disorders and threatened abortions
Androgens (male sex hormones) EXAMPLE: Dianobol	Assist in development and maintenance of male sex characteristics	Given to men when there is a decrease in the natural production; may be given to females with reproductive-tract cancers as palliative treatment

INFORMATION SHEET

Drug	Action	Uses
Ovulatory suppressants (Oral contraceptives) EXAMPLE: Ovral	A combination of estrogen and progesterone; act in various ways to inhibit ovulation	Used in preventing conception; have been used in some conditions associated with menstrual cycle
Fertility drugs EXAMPLE: Clomid	Most agents help to promote follicular growth and ovulatory functioning	Assist in promoting conception

XVII. Common groups of drugs that affect the muscular system

A. Centrally acting skeletal-muscle relaxants

1. Action of drug is not completely known, but research has shown that agents can depress nerve transmission through several spinal and supraspinal nerve pathways that control muscle tone

2. Physicians use these drugs because they have a sedative component that aids in treating muscle spasms

B. Direct-acting skeletal-muscle relaxants

1. Act directly on muscles by decreasing force of muscle contractions

2. Used for conditions such as spinal-cord injury and multiple sclerosis, and other conditions that produce muscle spasticity

C. Neuromuscular blocking agents

1. Used in surgery to produce relaxation of muscles during anesthesia; provide for easier intubation

2. Interfere with respiratory action; require close observation of patient by experienced personnel

(NOTE: Respiratory interference is the main side effect of these agents.)

XVIII. Groups of drugs that affect the urinary system and their actions

A. Diuretics--Promote flow of urine, and eliminate water and salts from body

B. Muscle relaxants (bladder)--Assist muscles of bladder to relax

C. Urinary analgesics--Relieve pain, burning, and urgency

D. Urinary antiseptics--Treat urinary-tract infections

INFORMATION SHEET

E. Uricosuric agents--Act on tubules of kidneys to promote excretion of uric acid

XIX. Actions of groups of drugs that affect the endocrine system

A. Thyroid-replacement hormones

1. These hormones replace natural body hormones that regulate body metabolism

2. Patients will need to remain on a maintenance dosage of these hormones indefinitely

B. Antithyroid agents

1. Act to lower the basal metabolic rate by interfering with formation, release, or action of hormones secreted by thyroid gland

2. Are used to treat Graves' disease, hyperthyroidism, and other conditions caused by an excess of thyroid hormones

C. Adrenocortical hormones/corticosteroids

1. Hormones/corticosteroids are used to treat conditions related to the adrenal gland and its hormones; are divided into two groups: (a) mineralocorticoids--used to help maintain water and electrolyte balance, and (b) glucocorticoids--used to regulate protein and fat metabolism, and carbohydrate production and usage in the body

2. Mineralocorticoids are used to treat Addison's disease and adrenal insufficiency diseases

3. Glucocorticoids are used to treat inflammatory conditions, especially arthritis

D. Insulin injections

1. Insulin injections are used to treat diabetes mellitus

2. Insulin is administered by injection and must be totally accurate

3. Dosages should be checked by two nurses before administration

   (NOTE: Order, medication card, bottle label, and syringe with dosage should all be checked for accuracy.)

4. Insulin is available in various types with a variety of actions; the nurse should know the characteristics of the various insulin types

E. Oral hypoglycemics

(NOTE: These drugs are not oral insulin agents.)

1. Oral hypoglycemics are used to treat diabetes mellitus; help stimulate insulin production

INFORMATION SHEET

2. Dosage depends on patient's blood sugar and sugar in the urine, much like the insulin treatment

3. Oral hypoglycemics act to lower blood sugar and are effective in some of the uncomplicated diabetes conditions

XX. Forms of insulin and oral hypoglycemic agents

A. Insulin

(NOTE: This chart is based on an early morning [7:30 A.M.] dosage.)

Rate of Action	Type of Insulin	Time of Action (hours)			When Hypoglycemia Is Most Apt to Occur
		Onset	Peak	Duration	
Rapid	Regular crystalline (clear, unmodified) (NOTE: This is the only insulin that may be given IV.)	1 hour or less	2-4	5-7	Before lunch
	Semilente (opaque)	1	2-8	12-16	Before lunch
Intermediate	Globin (clear)	2-4	6-12	12-18	Late afternoon
	NPH (opaque)	2-4	6-12	18-24	Late afternoon
	Lente (opaque)	2-4	6-12	18-24	Late afternoon
Slow	Protamine Zinc (opaque)	3-6	14-20	24-36	During night and early morning
	Ultralente (opaque)	8	18-24	24-36	During night and early morning

INFORMATION SHEET

B. Oral hypoglycemic agents

(NOTE: These agents are easier to administer than insulin and patients accept this therapy more easily. Oral agents promote stimulation of patient's own insulin. Patients may experience some side effects, such as rashes or GI disturbances, and there is more of a danger of toxicity with long-term use than with insulin.)

Generic Name	Brand or Trade Name	Usual Daily Dosage (in mg)	Duration of Action (in hours)
Acetohexamide	Dymelor	250-1000	12 - 24
Chlorpropamide	Diabinase	100-500	24 - 60
Tolazamide	Tolinase	250-1000	12 - 24
Tolbutamide	Orinase	500-2000	5 - 10

XXI. Groups of antineoplastic treatments and their actions

(NOTE: A great amount of research is being conducted at this time to find drugs to cure the many types of malignant diseases. Oncology is a specialty area that deals entirely with the treatment of patients affected by these diseases. Drug therapy will continue to be one of the most important forms of treatment to "cure" many of these conditions or provide long-term remission.)

A. Alkylating agents--Cause cellular injury by reacting with essential molecules within the cell; inhibit cell division

(NOTE: Unfortunately, these drugs are toxic not only to the cancerous cells but also to healthy gastrointestinal tissue and bone marrow.)

B. Antimetabolites--Work to arrest the stage of cell division called *mitosis*

(NOTE: This type of drug has been especially helpful in the use of acute leukemia of childhood.)

C. Hormones--Adrenal-gland secretions and ACTH are used to slow the growth of cells

(NOTE: ACTH or the adrenocorticotropic hormones are especially useful in treating young, actively growing, and multiplying cells.)

D. Radioactive isotopes--Waves that depress cell formation in various ways, depending on the malignancy and the wave used

INFORMATION SHEET

XXII. Nursing care specific to patients receiving antineoplastic drugs

A. Emotional

1. Prepare patients for side effects by telling them what they will experience and how to cope with the condition

2. Give support and reassurance to patients receiving chemotherapy; explain that side effects, such as nausea, vomiting, and hair loss, will subside after drug therapy is discontinued

B. Physical

1. Protect these patients from exposure to infections, since they will have a lowered resistance and cannot fight these infections as they normally would

2. Observe closely for physical symptoms that might indicate bleeding complications, neural involvement, and gastric distress

3. Review the frequent blood examinations that will help you assess patient's overall condition

XXIII. Antimicrobial drugs and their descriptions

(NOTE: These drugs are chemicals used to eliminate living microorganisms pathogenic to the patient. The drug of choice will be the one that the pathogen is sensitive to after being isolated. This is why a culture and sensitivity test is performed on a suspected source.)

A. Aminoglycosides--Agents used against gram-negative organisms that cause wound infections, urinary-tract infections, meningitis, and many septicemias

B. Penicillins--Agents that act by interfering with synthesis of bacterial cell walls; used against bacteria that grow rapidly

(NOTE: Many people have sensitivities to penicillins and will need to be questioned concerning their allergic reactions. The group of drugs known as *cephalosporins* are chemically related to the penicillins and are used for many of the same bacterial infections. The nurse must learn the name of these drugs and remember that if the patient is allergic to the penicillin group, he or she may also be sensitive to this group.)

C. Sulfonamides--Anti-infectives that act against bacteria by inhibiting bacterial biosyntheses of folic acid, thus causing cell death

D. Tetracyclines--Agents that are used against both gram-negative and gram-positive bacteria; inhibit protein synthesis by bacterial cells

E. Tuberculosis agents--Agents that inhibit tuberculosis bacterial growth by altering RNA synthesis and phosphate metabolism

INFORMATION SHEET

XXIV. Common serums and vaccines

A. Immune serums

(NOTE: Immune serums are made from the serum of a human being or animal that has specific antibodies in the bloodstream. This serum is transferred to the circulation of the patient, giving him or her antibodies that act on disease microorganisms and provide passive immunity.)

EXAMPLE: Immune serum globulin

B. Antigenic agents/vaccines

(NOTE: Vaccines are attenuated or killed microorganisms.)

EXAMPLES: Measles (rubeola), cholera, smallpox

C. Toxoids

(NOTE: *Toxoids* are toxins that are chemically modified to be nontoxic but still antigenic.)

EXAMPLES: Tetanus toxoid, diptheria toxoid

D. Allergens

EXAMPLES: Proteins used for desensitization and for diagnostic tests: feather pillows, animal fur

XXV. Major groups of drugs commonly abused

A. Central nervous system (CNS) depressants

EXAMPLES: Marijuana, THC

B. Central nervous system stimulants

EXAMPLES: Amphetamine, cocaine

C. Hallucinogens

EXAMPLES: LSD, mescaline

CLASSIFICATION AND EFFECTS OF DRUGS
UNIT III

ASSIGNMENT SHEET #1–MAKE DRUG CARDS AND FILING SYSTEM

NAME ______________________________ SCORE ____________________

It is very important for the nurse to know the drugs that he or she administers. Each day new drugs are developed and made available for use. One method of learning about the drugs you give is to make a drug-card filing system, adding to it as new drugs appear on the market. For this project you will need to purchase ruled index cards (3" x 5" or larger). These cards can be found in an office supply store or in a variety store in the office supply department. Begin your drug-card collection by looking up the drugs being taken by a patient you are caring for. Use a drug reference book to find the information you need as indicated below. Make a now card for each new drug your patient is given or that you administer. File the cards alphabetically according to the name of the drug. Record the information on your card as given in the sample below. Cards can be filed in a small three-ring notebook or put into a card file box and tabbed according to class of drug. The system will be evaluated periodically by your instructor.

FRONT OF CARD

Drug Trade Name	Classification	Generic Name
Valium	Tranquilizer	Diazepam

Indications/Use Symptomatic relief of anxiety and tension; Relief of skeletal muscle spasms

How Supplied Oral tabs 2mg., 5mg, and 10mg. IM or IV 10mg. 2ml/cc

Usual Dosage PO 2mg. to 10mg. 2 to 4x daily depending on Symptoms. IV or IM - 2mg to 5mg. May repeat in 3-4 hours

Side Effects Drowsiness, fatigue and ataxia, Constipation, depression hypotension, slurred speech, urinary retention. Drugs may become habitual Should avoid alcohol combination.

Other Information Do not mix valium or dilute with any other solution in syringe or infusion device.

(NOTE: Important information, warnings, or cautions may be written in red to emphasize their importance and to quickly alert reader.)

ASSIGNMENT SHEET #1

BACK OF CARD

Name of Initials of Patient: ______________________ Age: __________

____

Dosage: ______________________ Route of Adminstration: ___

Purpose of this Drug use for this Patient: ______________________

____

____

____

Nursing Implications: ______________________________

____

____

____

CLASSIFICATION AND EFFECTS OF DRUGS
UNIT III

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

CLASSIFICATION AND EFFECTS OF DRUGS
UNIT III

TEST

NAME ______________________________ SCORE ____________________

1. Match terms associated with the classification and effects of drugs to their correct definitions. Write the correct numbers in the blanks. Terms and definitions are continued on next page.

______a. Introduction of a fluid substance into a body, into a vessel or cavity, under the skin, or into a muscle

______b. Process by which drug is made available to body fluids to be distributed

______c. Limited to one part or place

______d. Within the heart

______e. Introduction of large quantities of fluid into subcutaneous tissues

______f. Substance secreted by islets of Langerhans of the pancreas that aids body in storing and using sugar

______g. Within the pleura or pleural cavity

______h. Acquired dependence upon narcotics or other drugs which stimulate or depress physiologic or mental activities

______i. One which causes death

______j. Introduction of a liquid into a body cavity

______k. Any symptom or circumstance indicating inappropriateness of a form of treatment otherwise advisable

______l. Generalized or affecting entire body

______m. Acquired tolerance from repeated use of a drug with little or no tendency to increase the dose

______n. Slow injection of a solution into a vein or into body tissue

1. Absorption
2. Infusion
3. Contraindication
4. Lethal dose
5. Drug addiction
6. Local effect
7. Habituation
8. Hypodermoclysis
9. Insulin
10. Instillation
11. Injection
12. Intrapleural
13. Systemic effect
14. Intracardial

TEST

_____o. Having medicinal or healing properties

_____p. Within the skin

_____q. Within the spinal canal

_____r. Application of chemical reagents which have specific and toxic effects upon disease-causing microorganisms

_____s. Ointment or medicated substance rubbed into skin to obtain a local or systemic effect

_____t. Serious, generalized reaction brought about by the administration of an allergen such as a drug or serum; usually occurs rapidly and can be fatal unless immediate emergency measures are taken

_____u. Pertaining to the nature of new abnormal tissue formation

_____v. Beneath the tongue

_____w. Introduction of substances into body through any route other than through alimentary canal

_____x. Condition characterized by inadequate supply of insulin

_____y. Within the peritoneum or peritoneal cavity

_____z. First dose given

_____aa. Ability to endure without ill effect, such as the continued use or increasing use of a drug

_____bb. Quantity of drug which will usually provide or produce the therapeutic effect for which it is being administered

15. Intrathecal
16. Chemotherapy
17. Intradermal
18. Tolerance
19. Average or usual dose
20. Initial dose
21. Therapeutic
22. Anaphylaxis
23. Inunction
24. Diabetes mellitus
25. Neoplastic
26. Parenteral injection
27. Sublingual
28. Intraperitoneal

2. List purposes for which drugs are given.

a. ____

b. ____

c. ____

TEST

3. Match therapeutic purposes of drugs to their correct actions. Write the correct numbers in the blanks.

______a. To assist in the healing process

______b. To cure a specific disease

______c. To replace substances usually found in the body; may be temporary or permanent replacement

______d. To relieve symptoms; help patient feel better

______e. To sustain patient until natural resistance overcomes illness or until other measures can be instituted

______f. To prevent disease from occuring

1. Restorative
2. Supportive
3. Substitutive
4. Palliative or symptomatic
5. Curative
6. Prophylactic

4. List patient factors which influence selection of medications.

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

5. Describe drug factors which influence selection of medications.

a. Purpose of drug--______________________________

____

____

____

____

b. Nature and form of drug--_________________________

____

____

____

____

TEST

c. Rate of absorption and excretion--

d. Rate and amount of metabolism--

e. Excretion of drug--

f. Possibility of addiction--

g. Drug combinations and interactions--

TEST

h. Method of administration--______________________________

____

____

____

____

i. Time of administration--______________________________

____

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____

____

j. Dosage of medication--______________________________

____

____

____

____

6. Match types of drug actions to their correct descriptions. Write the correct numbers in the blanks. Types and descriptions are continued on next page.

_____a. Action of a drug other than the main effect for which drug is given

_____b. Has power to act on a certain part of the body

_____c. Slows activity of body systems or organs

_____d. Harmful

_____e. Opposite or counteraction of one drug to another

_____f. Increases effectiveness by combining drug with one or more additional drugs

_____g. Coats and protects tissues

_____h. Increase in potency or decrease of side effects due to the working together of two drugs

1. Depressant
2. Side effect
3. Antagonistic
4. Synergistic
5. Untoward
6. Additive
7. Demulcent or emollient
8. Selective
9. Stimulant
10. Irritant
11. Cumulative
12. Principal effect

TEST

_____i. Speeds activity of body systems or organs

_____j. Therapeutic action most desired

_____k. Tendency to accumulate in system due to slow excretion; may be desired or undesired

_____l. Causes excessive cell activity; prolonged irritation depresses activity

7. Describe the primary effects of drugs on major centers of the central nervous system.

a. Cerebral cortex--____

____

____

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____

____

b. Thalamus and hypothalamus--______________________________________

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____

c. Spinal cord and reticular formation--_____________________________

____

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TEST

8. Match groups of drugs that affect the central nervous system to their correct actions. Write the correct numbers in the blanks.

_____a. Used as analgesics, antipyretics, and anti-inflammatory agents

_____b. Allay activity and excitement

_____c. Stimulate the central nervous system, give a feeling of well-being, lessen fatigue, and increase alertness and concentration

_____d. Produce sleep

_____e. Relieve pain without producing unconsciousness

_____f. Depress the sleep center, but act on many different levels depending on dose of drug; may potentiate central nervous system depressant effects of other drugs

_____g. Treat seizure activity

_____h. Suppress anxiety and modify behavior

_____i. Act as mood elevators; have mild tranquilizing effects

_____j. Produces progressive and continuous depression of the central nervous system (CNS)

_____k. Sedatives used in the treatment of anxiety and tension and some psychological disorders

1. Salicylates
2. Amphetamines
3. Sedatives
4. Analgesics
5. Tranquilizers
6. Hypnotics
7. Anticonvulsants
8. Barbiturates
9. Tricyclic antidepressants
10. Alcohol
11. Benzodiazepines

9. Describe actions of groups of drugs that affect the autonomic nervous system.

a. Catecholamines--______________________________________

TEST

b. Cholinergic agents--______________________________

____

____

____

____

c. Anticholingergic agents--______________________________

____

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____

10. Match common groups of drugs that affect the eye to their correct actions. Write the correct numbers in the blanks.

_____a. Produce pupil dilation, increased release of aqueous humor, vasoconstriction, relaxation of the ciliary muscle, and decrease in formation of aqueous humor

_____b. Produce an elevation of the osmotic pressure of the plasma that causes fluid from extravascular spaces to be drawn into the blood, causing a decrease in intraocular pressure

_____c. Produce strong contractions of the iris and ciliary body muscles and lower the intraocular pressure by widening the filtration angle that will permit the release of aqueous humor

_____d. Produce relaxation of the smooth muscle of the ciliary body and iris, causing dilation of the pupil

1. Osmotic agents
2. Anticholinergic agents
3. Cholinergic agents
4. Adrenergic agents

TEST

11. Describe groups of drugs that affect the cardiovascular system.

a. Anticoagulants--______________________________

____

____

____

____

____

____

b. Coagulants--______________________________

____

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____

c. Vasodilators--______________________________

____

____

____

____

____

d. Vasoconstrictors--______________________________

____

____

____

____

TEST

e. Antihypertensive agents--

f. Digitalis agents--

g. Antiarrhythmic agents--

TEST

12. State important facts related to giving a digitalis drug.

a.

b.

c.

d.

13. State information that should be given to patients receiving antihypertensive drugs.

a.

b.

TEST

c. ____

____

____

d. ____

____

____

e. ____

____

____

14. Match groups of drugs that affect the respiratory system to their correct actions. Write the correct numbers in the blanks.

______a. Act to prevent histamines from acting as a vasodilator

______b. Adrenergic or sympathomimetic agents that relax the smooth muscle of the tracheobronchial tree and promote an increase in the opening size to allow freer air flow; also, decrease congestion by vasoconstriction and by reducing swelling of mucous membranes

______c. Reduce irritation and relieve coughing when it is nonproductive

______d. Aid in shrinking engorged mucous membranes in nose and relieve nasal stuffiness

______e. Reduce viscosity of mucus or increase the productivity of secretions and aid in expulsion of mucus

______f. Liquefy pulmonary secretions and facilitate removal of these secretions by coughing, postural drainage, or suction

______g. Sticky substances that are used to protect the lining of the respiratory tract from irritations; are used to combine with other drugs used for the respiratory tract

1. Antihistamines
2. Expectorants
3. Mucolytic agents
4. Demulcents
5. Decongestants
6. Bronchodilators
7. Antitussives

TEST

15. Describe actions of drugs that affect the digestive system.

a. Antacids--

b. Digestants--

c. Emetics--

d. Antiemetics--

e. Cathartics--

f. Diagnostic agents--

g. Antidiarrheics--

TEST

16. Complete the following chart showing groups of drugs that affect the reproductive system.

Drug	Action	Uses
Oxytocics	Increase uterine contractions	a. ______________________ ______________________
Uterine contractions inhibitors	b. ______________ ______________ ______________ ______________	Inhibit contractions during premature labor
c. __________ __________ __________	Ovarian secretions responsible for development and maintenance of reproductive organs	Assist in controlling functional uterine bleeding, failure of ovary development, and suppression of lactation in postpartum patients Given to some males with cancers of the reproductive organs as palliative measures
Progesterone (Luteal hormones)	d. ______________ ______________ ______________ ______________	Used to treat menstrual disorders and threatened abortions
e. __________ __________ __________	Assist in development and maintenance of male sex characteristics	Given to men when there is a decrease in the natural production; may be given to females with reproductive-tract cancers as palliative treatment
Ovulatory suppressants (Oral contraceptives)	A combination of estrogen and progesterone; act in various ways to inhibit ovulation	f. ______________________ ______________________ ______________________ ______________________ ______________________
Fertility drugs	Most agents help to promote follicular growth and ovulatory functioning	g. ______________________ ______________________

TEST

17. Describe common groups of drugs that affect the muscular system.

    a. Centrally acting skeletal-muscle relaxants--______________________________

    ____

    ____

    ____

    ____

    b. Direct-acting skeletal-muscle relaxants--________________________________

    ____

    ____

    ____

    ____

    c. Neuromuscular blocking agents--______________________________________

    ____

    ____

    ____

    ____

18. Match groups of drugs that affect the urinary system to their correct actions. Write the correct numbers in the blanks.

______a. Assist muscles of bladder to relax

______b. Act on tubules of kidneys to promote excretion of uric acid

______c. Promote flow of urine, and eliminate water and salts from body

______d. Relieve pain, burning, and urgency

______e. Treat urinary-tract infections

1. Uricosuric agents
2. Muscle relaxants (bladder)
3. Diuretics
4. Urinary analgesics
5. Urinary antiseptics

TEST

19. Describe actions of groups of drugs that affect the endocrine system.

a. Thyroid-replacement hormones-- ______________________________

b. Antithyroid agents-- ______________________________

c. Adrenocortical hormones/corticosteriods-- ______________________________

d. Insulin injections-- ______________________________

e. Oral hypoglycemics-- ______________________________

TEST

20. Complete the following charts of information related to forms of insulin and oral hypoglycemic agents.

a. Insulin

Rate of Action	Type of Insulin	Time of Action (hours)			When Hypoglycemia Is Most Apt to Occur
		Onset	Peak	Duration	
Rapid	Regular crystalline (clear, unmodified)	1 hour or less	1) ____	5-7	Before lunch
	Semilente (opaque)	1	2-8	12-16	2) ____
Inter-mediate	Globin (clear)	2-4	6-12	12-18	Late afternoon
	3) ____	2-4	6-12	18-24	Late afternoon
	Lente (opaque)	2-4	6-12	4) ____	Late afternoon
Slow	Protamine Zinc (opaque)	5) ____	14-20	24-36	During night and early morning
	Uitralente (opaque)	8	18-24	24-36	6) ____ ____

b. Oral hypoglycemic agents

Generic Name	Brand or Trade Name	Usual Daily Dosage (in mg)	Duration of Action (in hours)
Acetohexamide	Dymelor	1) ____	12 - 24
Chlorpropamide	2) ____	100-500	24 - 60
Tolazamide	Tolinase	250-1000	3) ____
4) ____	Orinase	500-2000	5 - 10

TEST

21. Match groups of antineoplastic treatments to their correct actions. Write the correct numbers in the blanks.

______a. Adrenal-gland secretions and ACTH are used to slow the growth of cells

______b. Work to arrest the stage of cell division called *mitosis*

______c. Cause cellular injury by reacting with essential molecules within the cell; inhibit cell division

______d. Waves that depress cell formation in various ways, depending on the malignancy and the wave used

1. Hormones
2. Radioactive isotopes
3. Alkylating agents
4. Antimetabolites

22. Describe nursing care specific to patients receiving antineoplastic drugs.

a. Emotional--______________________________

b. Physical--______________________________

TEST

23. Match antimicrobial drugs to their correct descriptions. Write the correct numbers in the blanks.

______ a. Anti-infectives that act against bacteria by inhibiting bacterial biosyntheses of folic acid, thus causing cell death

______ b. Agents used against gram-negative organisms that cause wound infections, urinary-tract infections, meningitis, and many septicemias

______ c. Agents that are used against both gram-negative and gram-positive bacteria; inhibit protein synthesis by bacterial cells

______ d. Agents that inhibit tuberculosis bacterial growth by altering RNA synthesis and phosphate metabolism

______ e. Agents that act by interfering with synthesis of bacterial cell walls; used against bacteria that grow rapidly

1. Tetracyclines
2. Sulfonamides
3. Aminoglycosides
4. Penicillins
5. Tuberculosis agents

24. List common serums and vaccines.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

25. List major groups of drugs commonly abused.

a. ______________________________

b. ______________________________

c. ______________________________

(NOTE: Test question 26 lists the assignment sheet. It is an important part of this test. If it has not been completed, check with your instructor.)

26. Make drug cards and filing system.

CLASSIFICATION AND EFFECTS OF DRUGS
UNIT III

ANSWERS TO TEST

1. a. 11
   b. 1
   c. 6
   d. 14
   e. 8
   f. 9
   g. 12
   h. 5
   i. 4
   j. 10
   k. 3
   l. 13
   m. 7
   n. 2
   o. 21
   p. 17
   q. 15
   r. 16
   s. 23
   t. 22
   u. 25
   v. 27
   w. 26
   x. 24
   y. 28
   z. 20
   aa. 18
   bb. 19

2. a. Prevention or prophylaxis
   b. Diagnosis
   c. Therapeutic action

3. a. 1
   b. 5
   c. 3
   d. 4
   e. 2
   f. 6

4. a. Age, sex, and weight
   b. Physical condition
   c. Tolerance
   d. Idiosyncrasy of effect
   e. Hypersensitivity to drug
   f. Occupation

ANSWERS TO TEST

5. Descriptions should include the following
    a. Purpose of drug
        1) Influences time of dosage
        2) Influences amount and method of administration
    b. Nature and form of drug
        1) Physical and chemical properties of drug determine method of administration
        2) Nature and form of drug may determine area where drug is administered
    c. Rate of absorption and excretion
        1) Some drugs are absorbed and excreted rapidly and have a fleeting effect
        2) Other drugs are excreted slowly and can have a cumulative effect
    d. Rate and amount of metabolism
        1) Some drugs must be changed by the body into different substances to be effective or to be excreted
        2) Some drugs are active as they are ingested
    e. Excretion of drug
        1) Drugs may be eliminated by kidneys, skin, lungs, alimentary canal, and mucous membranes
        2) When a particular excretory function is impaired, some drugs must be avoided or be given in smaller dosages to be excreted by that system
    f. Possibility of addiction
        1) Medications that can become addictive should be used cautiously
        2) Other drugs may need to be substituted
    g. Drug combinations and interactions
        1) Drugs may increase or decrease the actions of each other
        2) Nurses should know what drugs patients are taking before administering new medications
    h. Method of administration
        1) Rate of absorption is directly related to method of administration
        2) Medications given intravenously are rapidly absorbed and may be given in smaller dosages, whereas rectal medications are absorbed slowly and must be given in larger dosages

ANSWERS TO TEST

i. Time of administration

  1) Time of administration may alter effect of drug

  2) Purpose of drug should be considered when time of administration is determined

j. Dosage of medication

  1) Doses of different levels may have different effects

  2) Purpose of drug is considered in determining dosage

6. a. 2
   b. 8
   c. 1
   d. 5
   e. 3
   f. 6
   g. 7
   h. 4
   i. 9
   j. 12
   k. 11
   l. 10

7. Descriptions should include the following

   a. Cerebral cortex

      1) Depressants decrease sharpness of sensation and perception, slow motor activity, decrease mental alertness, and may promote sleep

      2) Stimulants cause increased awareness, sharper impulses and sensations, increased muscle activity, and may cause restlessness

   b. Thalamus and hypothalamus

      1) Depressants depress cells in various parts of the thalamus, may interrupt impulses to the cerebral cortex, and relieve pain

      2) Drugs that depress areas in the hypothalamus may produce sleep; other drugs affect the heat-regulating center

   c. Spinal cord and reticular formation

      1) Large doses of spinal stimulants may cause convulsions

      2) Depressants on the reticular formation may cause sedation and loss of consciousness

ANSWERS TO TEST

8. a. 1
   b. 3
   c. 2
   d. 6
   e. 4
   f. 8
   g. 7
   h. 5
   i. 9
   j. 10
   k. 11

9. Descriptions should include the following

   a. Catecholamines

      1) Epinephrine speeds heart rate, raises blood pressure, constricts surface blood vessels, and relaxes smooth muscles in the respiratory tract

      2) Norepinephrine constricts blood vessels, speeds heart rate, and helps to maintain blood pressure

      3) Catecholamines are destroyed by digestive enzymes, so are given only in injectable forms

      4) Vital signs, especially blood pressure, must be monitored frequently when this group of drugs is given

   b. Cholinergic agents

      1) Produce effects similar to those of acetylcholine, a natural body substance that acts to slow the heart; increase gastric peristalsis and secretion; and increase contractions of the skeletal muscles and the urinary bladder

      2) Act to stimulate salivation, lower intraocular pressure in glaucoma, and stimulate intestines and bladder postoperatively

   c. Anticholinergic agents

      1) Block the effects of acetylcholine

      2) Are used in treatment in other body systems because of the effects produced

10. a. 4
    b. 1
    c. 3
    d. 2

ANSWERS TO TEST

11. Descriptions should include the following

    a. Anticoagulants

       1) Prevent or delay coagulation of blood by altering the formation of prothrombin, a substance that is produced by the body to aid in clotting of blood

       2) Are used in patients who are suffering from diseases or conditions that cause intravascular clotting

       3) Could cause abnormal bleeding from injuries--even minor ones--so patients must be very careful while taking these drugs

    b. Coagulants

       1) Promote clotting of the blood or hasten the natural clotting process; also known as *hemostatics*

       2) Are used in patients who have a deficiency of prothrombin, in special hemorrhagic conditions, and in special forms for patients who may have excess bleeding during surgery

    c. Vasodilators

       1) Produce dilation of blood vessels and aid in lowering blood pressure

       2) Are used in patients with hypertension, peripheral vascular disease, and a number of cardiovascular conditions

    d. Vasoconstrictors

       1) Produce constriction of blood vessels by causing contraction of muscle fibers of the walls of blood vessels, or by stimulating the vasomotor center in the medulla

       2) Are used to stop minor hemorrhages, relieve nasal congestion, and raise blood pressure

    e. Antihypertensive agents

       1) Sympathetic nervous system inhibitors are agents that reduce blood pressure by acting on the central nervous system

       2) Direct vasodilators are used to lower blood pressure directly by dilating the vessels

       3) Diuretics cause sodium excretion and vasodilation of peripheral arterioles and cause volume decrease of fluid; are usually used in combination with other anithypertensive agents

ANSWERS TO TEST

f. Digitalis agents

1) Digitalis agents reduce systemic and pulmonary congestion; slow and strengthen the heart by assisting the ventricles to empty and fill more completely

2) Patients are given a "digitalizing dose" to treat the acute congestion problem and then are put on a "maintenance dose"

g. Antiarrhythmic agents

1) Agents used will depend on the arrhythmia involved and the conduction problem

2) Many have blocking agents that inhibit the action of substances that stimulate conduction impulses

3) Other drugs act directly on the muscles of the heart to decrease irritability and slow the action of conduction impulses

12. a. Agents are cumulative, and patients may experience toxicity reactions if not carefully monitored

b. Nurses need to be aware of the symptoms of toxicity, such as patient complaints of headaches, vision disturbances, weakness, nausea, vomiting, and diarrhea

c. Pulse rates should be monitored closely because the drug causes a slowing of the heart rate; apical pulse should be taken before administration of the drug, and drug should be withheld if pulse is below sixty beats per minute; physician should be notified and facts should be documented

d. Nurses need to check dosages and labels very carefully before administering these drugs

13. a. An explanation of hypertension and how it affects blood pressure, heart, kidneys, and brain should be given to the patient in terms he or she can understand

b. Each drug and the combined effects of other drugs should be explained to the patient

c. Diet habits will need to be evaluated and regulated, with a decrease in sodium and a reduction of weight if needed

d. Exercise, relaxation, reduction or elimination of cigarette smoking, and regular times for a hobby should be discussed with the patient to assist him or her to begin a more restful and less stress-filled lifestyle

e. Drug therapy may affect patient's sexuality

ANSWERS TO TEST

14. a. 1
    b. 6
    c. 7
    d. 5
    e. 2
    f. 3
    g. 4

15. Descriptions should include the following

    a. Antacids

       1) Act by lowering the acidity of gastric secretions by buffering hydrochloric acid

       2) Are used to treat heartburn and peptic ulcer disease; long-term usage may mask symptoms of serious underlying disease, so use should be monitored

    b. Digestants

       1) Digestants aid digestion by supplementing deficiencies of the gastrointestinal tract

       2) Various agents are given to supply needed gastric substances, like hydrochloric acid, acidulin, pepsin, and bile salts

    c. Emetics

       1) Emetics are used to induce vomiting, especially in an emergency when quick emptying of the stomach is needed

       2) Ipecac syrup is the only emetic used today and must be used only for the conscious patient

    d. Antiemetics

       1) Antiemetics are used to relieve symptoms of nausea and vomiting

       2) Drug used depends on primary reason for symptoms; conditions may require nervous-system depressants, antihistamines, or tranquilizers

    e. Cathartics

       1) Cathartics may be used as laxatives or purgatives, depending on the need, dosage, and type

       2) Drugs are classified according to their method of action, such as bulk-producing, irritant, lubricant, fecal softeners, and saline cathartics

       3) Laxatives should not be taken routinely, as the chronic use of cathartics is habit-forming

ANSWERS TO TEST

f. Diagnostic agents

1) Diagnostic agents are used for various gastrointestinal diagnostic procedures

2) Most common agent is barium sulfate, used to assist in viewing of the GI tract by X ray because barium is impermeable to the rays and may be seen as a milky shadow

3) Another common agent is diagnex blue, used to detect gastric anacidity

4) A group of drugs used to determine acidity would be the histamines

g. Antidiarrheics

1) Antidiarrheics are grouped into antiperistaltic agents, demulcents, and absorbents

2) Actions range from soothing the GI tract, to coating the tract, to relief of painful muscle spasms

16. a. Stimulate contractions during labor

b. Slow or control uterine motility by acting on the CNS or as muscle relaxants

c. Estrogens (follicular hormones)

d. Corpus luteum secretions that aid in preparing the uterine and ovarian conditions during pregnancy

e. Androgens (male sex hormones)

f. Used in preventing conception; have been used in some conditions associated with menstrual cycle

g. Assist in promoting conception

17. Descriptions should include the following

a. Centrally acting skeletal-muscle relaxants

1) Action of drug is not completely known, but research has shown that agents can depress nerve transmission through several spinal and supraspinal nerve pathways that control muscle tone

2) Physicians use these drugs because they have a sedative component that aids in treating muscle spasms

b. Direct-acting skeletal-muscle relaxants

1) Act directly on muscles by decreasing force of muscle contractions

2) Used for conditions such as spinal-cord injury and multiple sclerosis, and other conditions that produce muscle spasticity

ANSWERS TO TEST

c. Neuromuscular blocking agents

1) Used in surgery to produce relaxation of muscles during anesthesia; provide for easier intubation

2) Interfere with respiratory action; require close observation of patient by experienced personnel

18. a. 2

b. 1

c. 3

d. 4

e. 5

19. Descriptions should include the following

a. Thyroid-replacement hormones

1) These hormones replace natural body hormones that regulate body metabolism

2) Patients will need to remain on a maintenance dosage of these hormones indefinitely

b. Antithyroid agents

1) Act to lower the basal metabolic rate by interfering with formation, release, or action of hormones secreted by thyroid gland

2) Are used to treat Graves' disease, hyperthyroidism, and other conditions caused by an excess of thyroid hormones

c. Adrenocortical hormones/corticosteroids

1) Hormones/corticosteroids are used to treat conditions related to the adrenal gland and its hormones; are divided into two groups: (a) mineralocorticoids--used to help maintain water and electrolyte balance, and (b) glucocorticoids--used to regulate protein and fat metabolism, and carbohydrate production and usage in the body

2) Mineralocorticoids are used to treat Addison's disease and adrenal insufficiency diseases

3) Glucocorticoids are used to treat inflammatory conditions, especially arthritis

d. Insulin injections

1) Insulin injections are used to treat diabetes mellitus

2) Insulin is administered by injection and must be totally accurate

ANSWERS TO TEST

        3) Dosages should be checked by two nurses before administration
        4) Insulin is available in various types with a variety of actions; the nurse should know the characteristics of the various insulin types
    e. Oral hypoglycemics
        1) Oral hypoglycemics are used to treat diabetes mellitus; help stimulate insulin production
        2) Dosage depends on patient's blood sugar and sugar in the urine, much like the insulin treatment
        3) Oral hypoglycemics act to lower blood sugar and are effective in some of the uncomplicated diabetes conditions

20. a. 1) 2-4
        2) Before lunch
        3) NPH (opaque)
        4) 18-24
        5) 3-6
        6) During night and early morning
    b. 1) 250-1000
        2) Diabinase
        3) 12-24
        4) Tolbutamide

21. a. 1
    b. 4
    c. 3
    d. 2

22. Descriptions should include the following
    a. Emotional
        1) Prepare patients for side effects by telling them what they will experience and how to cope with the condition

ANSWERS TO TEST

2) Give support and reassurance to patients receiving chemotherapy; explain that side effects, such as nausea, vomiting, and hair loss, will subside after drug therapy is discontinued

b. Physical

1) Protect these patients from exposure to infections, since they will have a lowered resistance and cannot fight these infections as they normally would

2) Observe closely for physical symptoms that might indicate bleeding complications, neural involvement, and gastric distress

3) Review the frequent blood examinations that will help you assess patient's overall condition

23. a. 2
    b. 3
    c. 1
    d. 5
    e. 4

24. a. Immune serums
    b. Antigenic agents/vaccines
    c. Toxoids
    d. Allergens

25. a. Central nervous system (CNS) depressants
    b. Central nervous system stimulants
    c. Hallucinogens

26. Evaluated to the satisfaction of the instructor

ADMINISTRATION OF MEDICATIONS
UNIT IV

UNIT OBJECTIVE

After completing this unit, the student should be able to select and use correct equipment to administer drugs accurately and safely. The student should also be able to read physician's orders and transfer them to appropriate forms. This knowledge will be shown by completing assignment sheet, job sheets, and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with administration of medications to their correct definitions.
2. State facts about medicine orders.
3. Select from a list items that a prescription must include.
4. Describe information needed on the doctor's order sheet for medications.
5. List causes of common errors made in medication orders.
6. Complete a medicine card.
7. Label graduations or measurements usually found on a medicine glass.
8. State the "rights" of administering medications.
9. Select from a list principles to remember when preparing medications for administration.
10. State safety measures in giving medications.
11. Label parts of the syringe and needle.
12. Identify types of syringes used for injections.
13. Describe size and length of needles used for injections.
14. State factors that influence selection of syringes and needles.
15. Identify common methods of administration by injection.
16. Label sites for each method of administration by injection.

OBJECTIVE SHEET

17. Distinguish among factors which influence the selection of each method of administration by injection.

18. List purposes of local applications.

19. Describe types, methods, and purposes of local applications.

20. List common purposes of rectal administration.

21. State physiological changes in the aging patient that should be considered when administering medications.

22. Select from a list ways to give medications effectively to the elderly.

23. State ways to give medications effectively to children.

24. Select from a list facts about administration of insulin.

25. Transcribe medication orders from doctor's orders sheets to medication cards.

26. Demonstrate the ability to

    a. Read a medicine glass.

    b. Use a syringe.

    c. Prepare an injection from a vial and an ampule.

    d. Use a cartridge syringe.

    e. Locate intramuscular injection sites (adults and children).

    f. Administer injections (adults and children).

    g. Administer sublingual and buccal medications.

    h. Apply topical medication.

    i. Apply medicated wet dressings.

    j. Administer aromatic ammonia.

    k. Prepare insulin for injection.

ADMINISTRATION OF MEDICATIONS
UNIT IV

SUGGESTED ACTIVITIES

I. Suggested activities

A. Order materials planned to supplement unit.

1. Filmstrips

a. *Drugs: Action and Interaction.* Available from Concept Media, P.O. Box 19542, Irvine, California 92714.

b. *Intramuscular and Subcutaneous Injections.* Available from Trainex Corporation, P.O. Box 116, Garden Grove, California 92642.

2. Simulated models--Injectable training arms, models of gluteus medius, ventrogluteal, vastus lateralis, and the quadratus femoris for intramuscular injection are available from Trainex Corporation, P.O. Box 116, Garden Grove, California 92642.

B. Make transparency.

C. Provide students with objective sheet.

D. Provide students with information, assignment, and job sheets.

E. Discuss unit and specific objectives.

F. Discuss information and assignment sheets.

G. Demonstrate and discuss procedures outlined in job sheets.

H. Develop appropriate learning activities for special needs students.

I. Provide forms used in your facility for medication orders to use in Assignment Sheet #1 if different from those provided.

J. Use copies of medication orders form from actual physician's orders so that students may practice transcribing information.

K. Obtain all needed equipment to demonstrate job sheets and enough syringes and needles, vials, and ampules for each student to be able to use several times.

(NOTE: Often, pharmacies will give you outdated or extra vials or ampules of sterile water or normal saline for students' practice. Some of the pharmaceutical companies will provide syringes and other equipment, pamphlets, or films to use in teaching the use of this equipment.)

SUGGESTED ACTIVITIES

L. Allow as much practice time as needed for students to become confident with equipment.

M. Allow students to practice injections with classmates if permissible; if not, use an orange, styrofoam cup, or a simulated practice with other items.

(NOTE: At this time students could practice making out medication profiles, cards, and other chart forms, setting up medication trays or cart, and administering oral and parenteral medications.)

N. Give test.

O. Reteach if necessary.

II. Instructional materials

A. Objective sheet

B. Suggested activities

C. Information sheet

D. Transparency master: TM #1--Rotating Insulin Injection Areas

E. Assignment Sheet #1--Transcribe Medication Orders from Doctor's Orders Sheets to Medication Cards or Patient Profiles

F. Answers to assignment sheet

G. Job sheets

1. Job Sheet #1--Read a Medicine Glass
2. Job Sheet #2--Use a Syringe
3. Job Sheet #3--Prepare Injection from a Vial and an Ampule
4. Job Sheet #4--Use a Cartridge Syringe
5. Job Sheet #5--Locate Intramuscular Injection Sites (Adults and Children)
6. Job Sheet #6--Administer Injections (Adults and Children)
7. Job Sheet #7--Administer Sublingual and Buccal Medications
8. Job Sheet #8--Apply Topical Medication
9. Job Sheet #9--Apply Medicated Wet Dressings
10. Job Sheet #10--Administer Aromatic Ammonia
11. Job Sheet #11--Prepare Insulin for Injection

SUGGESTED ACTIVITIES

H. Test

I. Answers to test

III. Unit references

A. Robinson, Jean, ed. *Giving Medications.* Horsham, Pennsylvania: "Nursing 80 Photobook," Intermed Communications, Inc., 1980.

B. Sloan, Jamee. *Medical Assistant.* Stillwater, Oklahoma: State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1981.

C. Squire, Jessie E., and Bruce D. Clayton. *Basic Pharmacology for Nurses,* 7th ed. St. Louis, Missouri: The C.V. Mosby Company, 1981.

ADMINISTRATION OF MEDICATIONS
UNIT IV

INFORMATION SHEET

I. Terms and definitions

A. Antiseptic--Compound which prevents or arrests growth of bacteria but does not necessarily kill bacteria

B. Aromatic ammonia--Aromatic solution of ammonia and ammonium carbonate with a pungent odor (Job Sheet #10)

C. Aspirate--To withdraw fluids and/or gases from a cavity

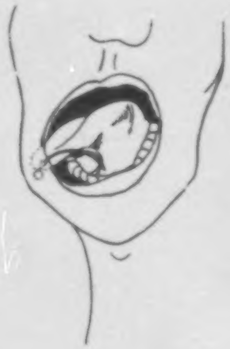
D. Astringent--Agent that contracts or shrinks tissues or mucous membranes

E. Buccal--Pertaining to the cheek (Figure 1; Job Sheet #7)

(NOTE: Only a few drugs can be absorbed in sufficient amounts through the sublingual and buccal mucous membranes. The dissolved drug is absorbed by the capillaries in the selected site. To use this method, the patient must be cooperative and alert.)

EXAMPLE: Pitocin

FIGURE 1



F. Counterirritant--Agent that produces a superficial inflammation for relief of a deeper inflammation in adjacent tissue

G. Dehydration--Condition resulting from excessive loss of fluids from the body

H. Desensitization--Loss of sensitivity

EXAMPLES: Local anesthetic, antigens given to desensitize person against allergens

INFORMATION SHEET

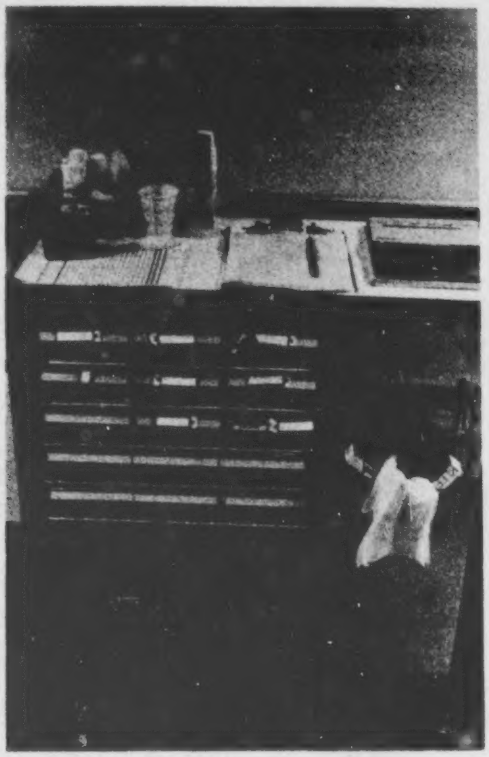
I. Functional system--The administration of unit dose prepared medications, using traditional medication card and Kardex from a central nurses' station

J. Medicine cart system--The administration of unit dose prepared medications, using a mobile cart with individual patient's medications administered according to patient profile (Figure 2)

(NOTE: The cart is taken to each patient's room, medicine is taken from an individual drawer with the patient's name and room number labeled, and the profile card is filled out after medication is administered. *Never* leave the cart unattended or unlocked.)

EXAMPLE:

FIGURE 2



K. Meniscus--Concave surface seen when liquids are poured into a measuring cup; caused by surface tension that pulls up portion of liquid touching glass

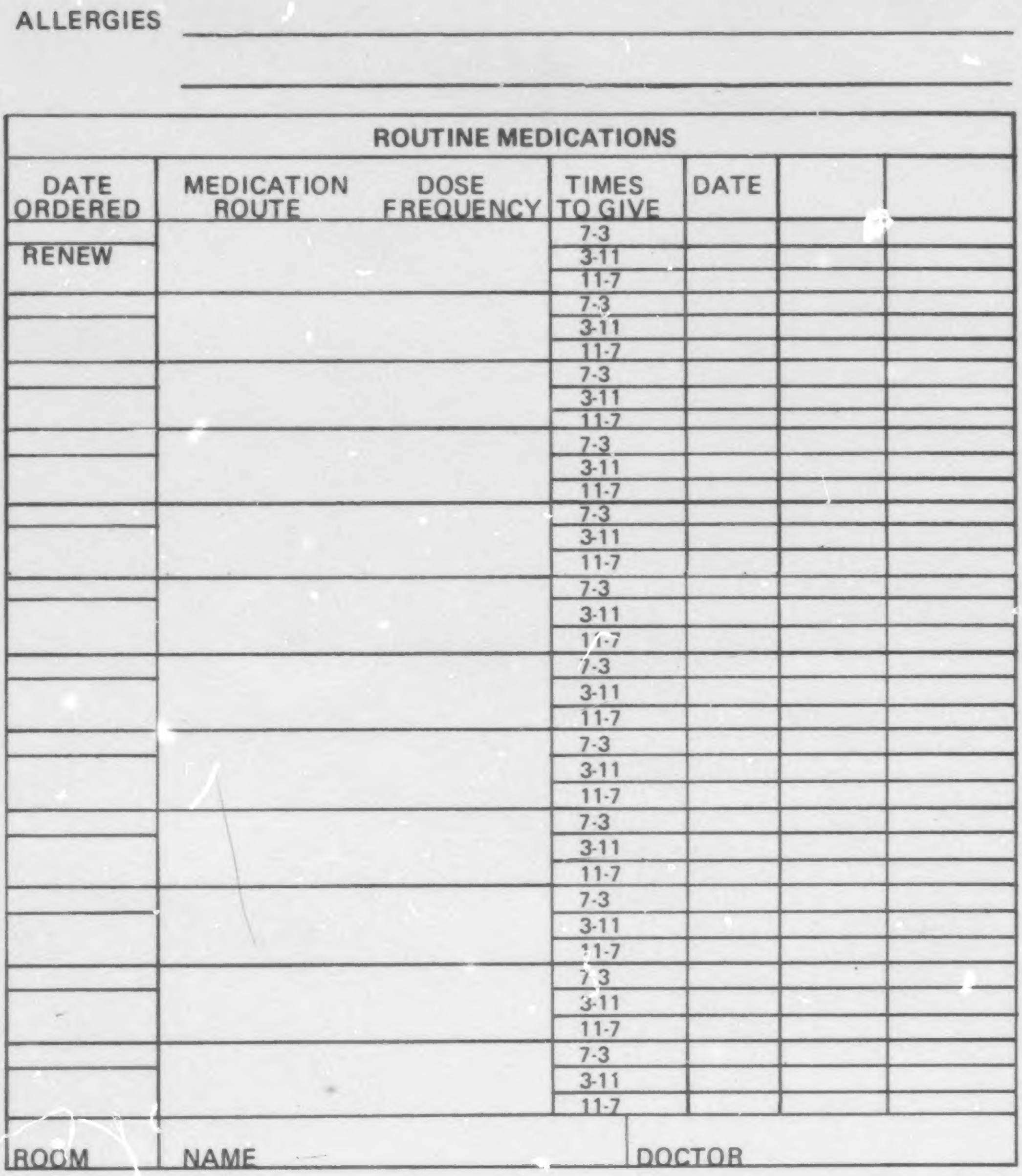
(NOTE: For accuracy, the amount of liquid should be read at eye level.)

INFORMATION SHEET

L. Patient profile--System of documenting administration of patient's medication using one card or form (Figure 3)

EXAMPLE:

FIGURE 3



ALLERGIES ____________________

____

ROUTINE MEDICATIONS						
DATE ORDERED	MEDICATION ROUTE	DOSE FREQUENCY	TIMES TO GIVE	DATE		
			7-3			
RENEW			3-11			
			11-7			
			7-3			
			3-11			
			11-7			
			7-3			
			3-11			
			11-7			
			7-3			
			3-11			
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			7-3			
			3-11			
			11-7			
			7-3			
			3-11			
			11-7			
ROOM	NAME			DOCTOR		

Used with permission of Fenton Office Supply Company, Stillwater, Oklahoma.

INFORMATION SHEET

M. Sublingual--Beneath the tongue (Figures 4 and 5; Job Sheet #7)

EXAMPLE: Nitroglycerin

FIGURE 4

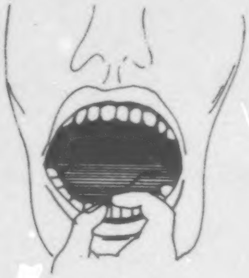
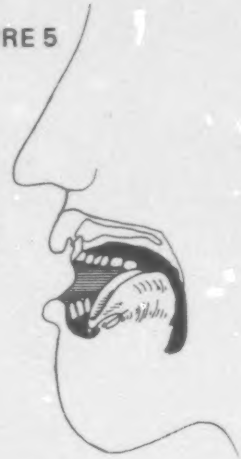


FIGURE 5



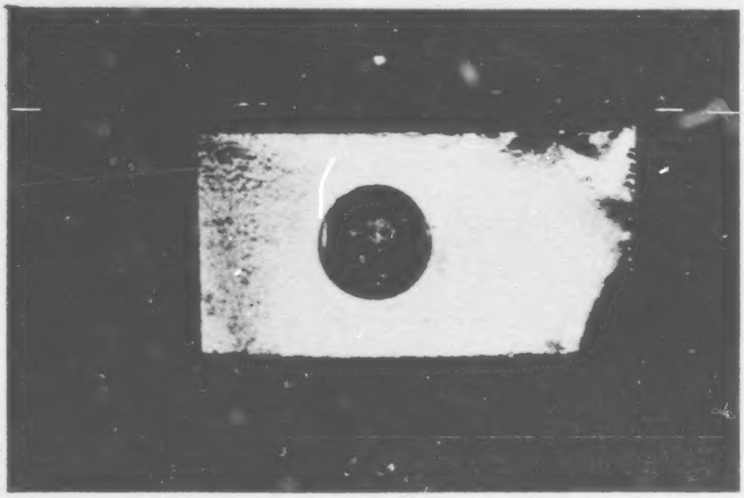
N. Syncope--Temporary suspension of consciousness; fainting

O. Syringe--Plastic, glass, or metal apparatus designed to withdraw or inject fluids for diagnostic or therapeutic purposes

P. Unit dose--Premeasured dosage of medication prepared in pharmacy and sent to floor to be used for administration (Figure 6)

EXAMPLE:

FIGURE 6



INFORMATION SHEET

Q. Urticaria--Hives; skin condition characterized by appearance of itching, elevated welts or wheals

R. Wheal--Suddenly formed elevation of skin surface

II. Facts about medicine orders

A. Name of medicine, amount to be given, route of administration, and time and frequency of dosage must be stated

B. All medication orders must be originated by licensed physician or dentist and signed within twenty-four hours

C. If necessary, verbal orders may be taken by phone or in person by a licensed person; orders must be signed by physician within twenty-four hours

D. If there is any doubt concerning a medication order, the nurse should consult charge nurse or physician

(NOTE: The pharmacist would be a resource person to consult if a drug or dosage is questioned, as would be any drug references available.)

E. When an order is discontinued, this information should be documented as soon as possible according to hospital procedure

F. No nurse can change or alter a physician's order in any way

G. Follow automatic stop orders as indicated by hospital policy

(NOTE: Many medications will be given for a certain period of time and then discontinued. At this time, the medication will need to be reordered by the physician.)

H. *Never* disregard an order

(NOTE: The nurse must carry through on all orders. If the nurse questions an order, he or she should carry through the correct chain of communication to handle the order, but *never* just disregard the order.)

III. Items that a prescription must include (Figures 7 and 8)

A. Patient's name, address, and date

B. Names and quantities of ingredients

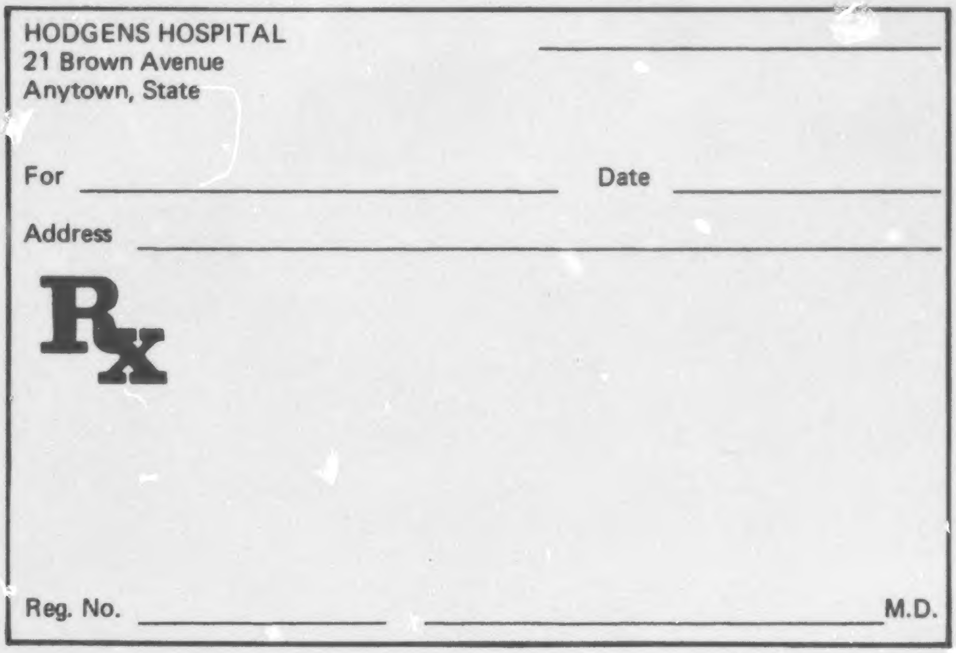
C. Directions to patient

INFORMATION SHEET

D. Signature, address, and when needed, the registry number of physician

(NOTE: The registry number is an official number issued by the state medical association to physicians permitted to prescribe scheduled drugs.)

FIGURE 7



HODGENS HOSPITAL
21 Brown Avenue
Anytown, State

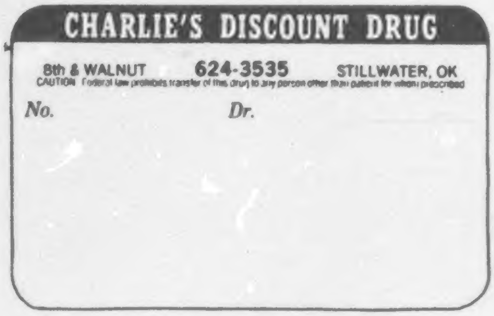
For ______________________ Date ______________

Address ______________________________________

℞

Reg. No. ______________ ______________________ M.D.

FIGURE 8



CHARLIE'S DISCOUNT DRUG

8th & WALNUT 624-3535 STILLWATER, OK

CAUTION Federal law prohibits transfer of this drug to any person other than patient for whom prescribed

No. *Dr.*

Medication Label

INFORMATION SHEET

IV. Information needed on doctor's order sheet for medications (Figure 9)

A. Patient's name, room number, name of physician

1. An addressograph stamp may be used to print this information

2. Patient's full name should be written on sheet

(NOTE: There may be two Bill Smiths with the same physician, and charts may become confused.)

B. Medication orders

1. Date, time, name of drug (generic or trade), dosage, route of administration, and times of administration

2. Physician's signature

3. Information should be clearly written; if it is not understandable, it should be checked with physician

(NOTE: Orders should be written with ballpoint pen rather than pencil.)

EXAMPLE:

FIGURE 9

PHYSICIAN'S ORDERS	PATIENT'S FULL NAME HOSPITAL NUMBER ROOM NUMBER PHYSICIAN'S NAME DATE

DATE ORDERED	RX	NO.	PHYSICIAN'S ORDERS
2-10-83		1)	aspirin 0.3 gm. tid pc (PO)
		2)	Milk of Magnesia® ʒi hs (PO)
		3)	Furadantin 50 mg tid pc (PO)
			Joe Cross, M.D.
2-16-83		1)	DC Furadantin
		2)	DC aspirin
		3)	Tylenol 1 tab. (PO) q̄ 3-4 hrs PRN
			Joe Cross M.D.

INFORMATION SHEET

V. Causes of common errors made in medication orders (Assignment Sheet #1)

(NOTE: The nurse may be able to catch and correct mistakes made on medication orders before serious errors with grave consequences occur.)

A. Abbreviations written incorrectly

EXAMPLE: Physician writes "g" when the intent was to write "mg."

B. Names of patients that look or sound alike

C. Drug names that sound alike or are spelled similarly

EXAMPLES: Digoxin, digitoxin

D. Misplaced decimal points

EXAMPLE: 2.5 mg instead of 25 mg

E. Poor handwriting scribbled in haste

VI. Information necessary for medicine cards (Figure 10)

A. Patient's full name

B. Room number and bed

C. Name of medication

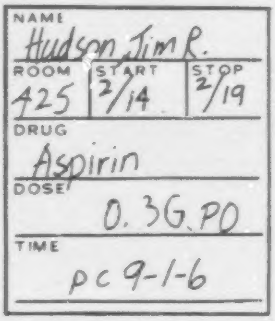
D. Dosage and route of medication

E. Time or times medication is given

(NOTE: Initial date and discontinuing date and time may also be included.)

EXAMPLE:

FIGURE 10



NAME Hudson, Jim R.

ROOM 425

START 2/14

STOP 2/19

DRUG Aspirin

DOSE 0.3G.PO

TIME pc 9-1-6

INFORMATION SHEET

VII. Graduations or measurements usually found on a medicine glass (Figures 11 and 12; Job Sheet #1)

FIGURE 11

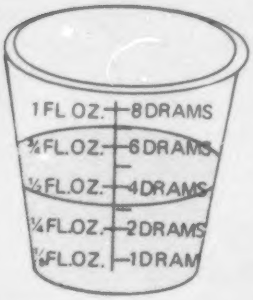
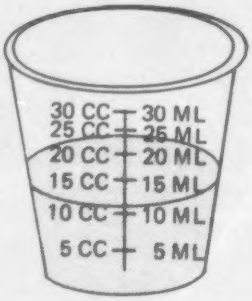

1 FL OZ.
8 DRAMS
¾ FL.OZ.
6 DRAMS
½ FL.OZ.
4 DRAMS
¼ FL.OZ.
2 DRAMS
⅛ FL.OZ.
1 DRAM

FIGURE 12


30 CC
30 ML
25 CC
25 ML
20 CC
20 ML
15 CC
15 ML
10 CC
10 ML
5 CC
5 ML

VIII. "Rights" of administering medications

A. Right patient

B. Right medication

C. Right amount

D. Right route of administration

E. Right time and date

F. Right chart

IX. Principles to remember when preparing medications for administration

A. Concentrate on the task at hand--preparing medications

B. Avoid handling medications with your fingers; pour tablets or capsu into lid of medicine bottle so that extras can be returned to bottle

C. Shake liquid medicines, if needed, before measuring

D. Pour from side opposite label to avoid soiling it

E. Hold medicine glass straight and at eye level when measuring liquids

INFORMATION SHEET

F. Place thumbnail on medicine glass to mark correct dose (Figure 13)

FIGURE 13

G. Wipe neck of bottle, if necessary, after pouring a liquid medication

H. Do not dilute cough syrup

I. Use special measuring devices as needed

X. Safety measures in giving medications

(NOTE: Use check system indicated by the hospital to double-check chart, Kardex, medicine cards, or patient profile to validate drug orders.)

A. Follow policies and directives of institution

B. Give only medications which you prepare

INFORMATION SHEET

C. Always read medication label three times: once before taking container from shelf; once more before pouring (check label with medication card); and last, when returning container to shelf (Figures 14-16)

FIGURE 14

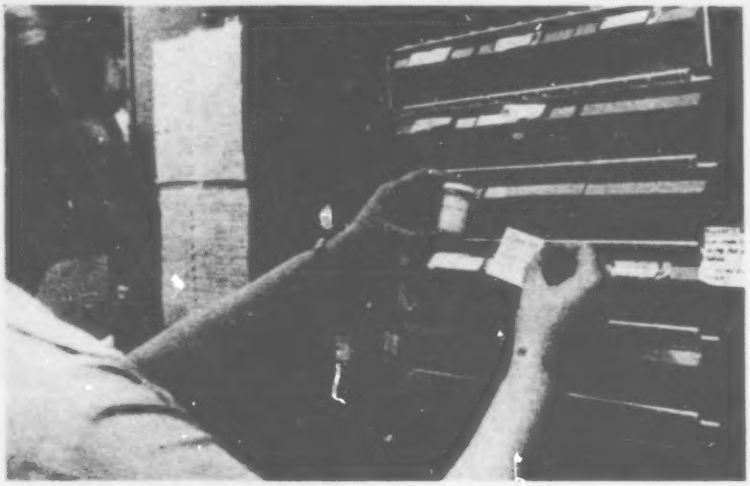
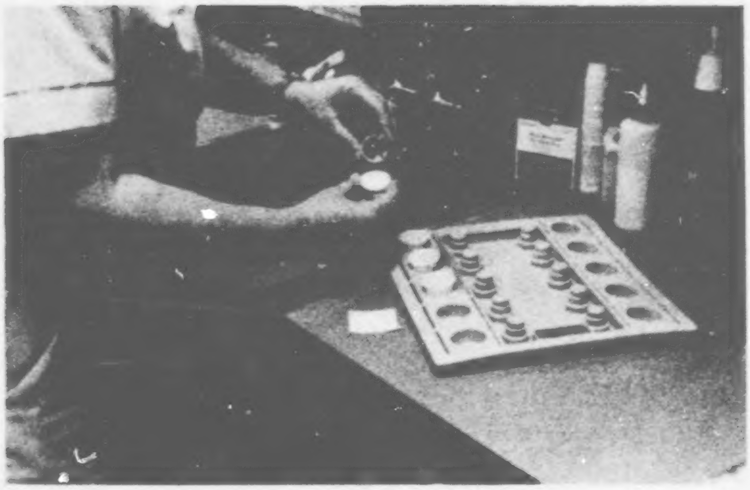


FIGURE 15



INFORMATION SHEET

FIGURE 16

D. Never use an unlabeled bottle

(NOTE: When the label is soiled or otherwise difficult to read, return container to pharmacy to be relabeled.)

E. Give only medication for which there is a written order; document accurately

F. Know why the medicine is given, its maximum dose, the expected reactions and/or adverse symptoms, and why the medication is being given to that particular patient

G. *Do not* return medicine to a container after pouring it

(NOTE: An exception to this rule is a prepackaged dose which may be returned to the container.)

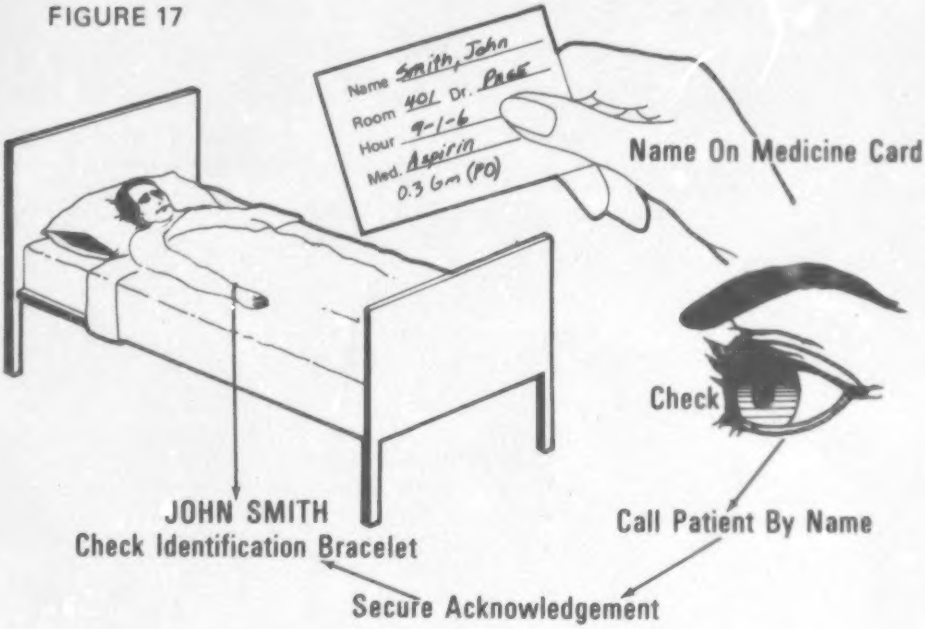
H. *Do not* combine two partially filled containers of like medication

I. Keep medications and medicine cards together until medication is given

INFORMATION SHEET

J. Make positive patient identification before giving any medication (Figure 17)

FIGURE 17


Name Smith, John
Room 401 Dr. PAGE
Hour 9-1-6
Med. Aspirin
0.3 Gm (PO)
Name On Medicine Card
Check
JOHN SMITH
Check Identification Bracelet
Call Patient By Name
Secure Acknowledgement

K. Do not leave medication at patient's bedside unless so ordered; stay with patient until medicine is taken

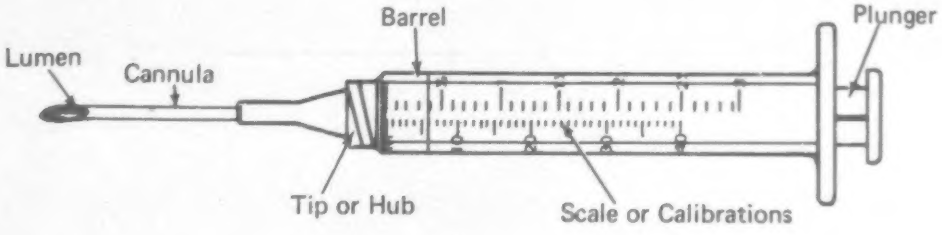
L. Keep medication tray or cart in sight at all times while administering medications

M. Make accurate and exact measurements of medications

XI. Parts of the syringe and needle (Figure 18)

(NOTE: Aseptic technique must be used when handling syringes and needles. The needle, the tip or hub, the inside of the barrel, and the plunger *must* be kept sterile.)

FIGURE 18


Barrel
Plunger
Lumen
Cannula
Tip or Hub
Scale or Calibrations

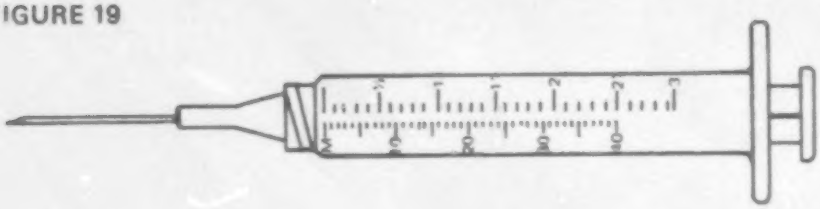
INFORMATION SHEET

XII. Types of syringes used for injections (Figures 19-23)

A. Standard

(NOTE: The size varies from 2 1/2 ml/cc to 50 ml/cc according to use.)

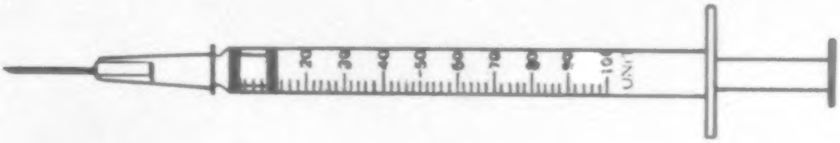
FIGURE 19



B. Insulin

(NOTE: Calibrations correspond to unit strength of insulin. The syringe used in giving insulin must be marked to correlate with the strength of insulin being used. At this time, the use of only one strength of insulin, U 100, is being recommended to prevent miscalculations, overdosages and underdosages of insulin. There are some patients who cannot tolerate the concentrated strength of U 100 and will receive U 40. Color-coded syringes are used for U 40.)

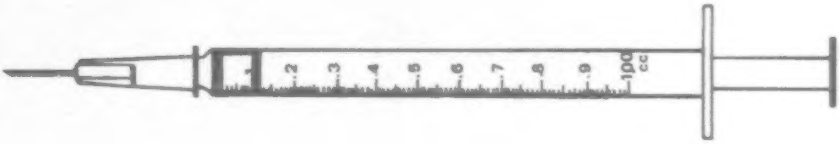
FIGURE 20



C. Tuberculin

(NOTE: These syringes are used to administer doses of less than 1 ml/cc. The tuberculin syringe is commonly used to measure tuberculin and antigens for allergies.)

FIGURE 21

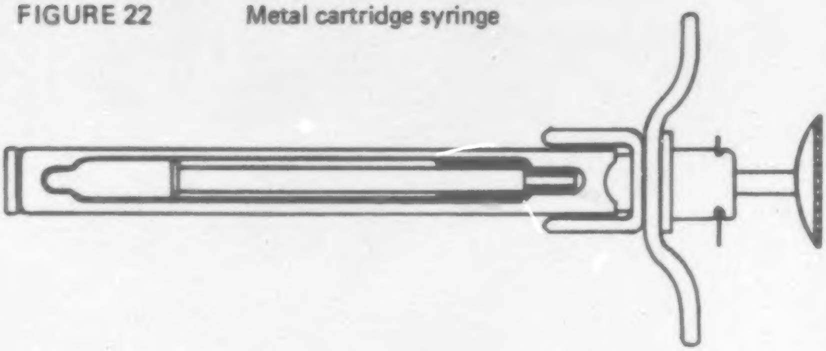


INFORMATION SHEET

D. Cartridge

(NOTE: These metal or plastic reusable syringes are fitted with prepared cartridges with an attached needle. The cartridge with needle is used once and discarded. Follow manufacturer's instructions when using a cartridge-type syringe.)

FIGURE 22 Metal cartridge syringe



XIII. Size and length of needles used for injections (Figure 23; Job Sheet #2)

A. Gauge ranges from 16 to 27

B. Smaller lumen needles have larger gauge numbers than larger lumen needles

EXAMPLE: Size 25 is a smaller gauge than size 18

C. Length ranges from 1/2" to 2"

D. Long needles (1" to 1 1/2") with large gauges are used for intramuscular injections and intravenous and hypodermoclysis infusions

INFORMATION SHEET

E. Short needles (1/2" to 1") with small gauges are used to give intradermal and/or hypodermic subcutaneous injections

EXAMPLES: Intradermal--Use tuberculin syringe with 1/2" needle: 26 or 27 gauge needle.

Subcutaneous--Use 2 1/2 ml/cc to 5 ml/cc syringe with 1/2" to 1" needle: 24 or 25 gauge needle.

Intramuscular--Use 2 1/2 ml/cc to 5 ml/cc syringe with 1" to 1 1/2" needle: 20 to 22 gauge needle.

FIGURE 23

XIV. Factors that influence selection of syringes and needles (Job Sheets #3 and #4)

(NOTE: The size and length of the needle depends on the size of the patient and type and amount of medication to be given. For example, thick or oil solutions are given with large-gauge needles, and irritating substances should be given with long needles. Syringes may be any size, except when very small amounts of fluid are to be injected; then tuberculin syringes should be used.)

A. Type of medication

EXAMPLES: Oil-based medications would call for a large lumen needle; needle should be changed after drawing up irritating medications.

B. Route of administration

EXAMPLE: Subcutaneous injections call for small, short needles.

INFORMATION SHEET

C. Age, size, and physical condition of patient

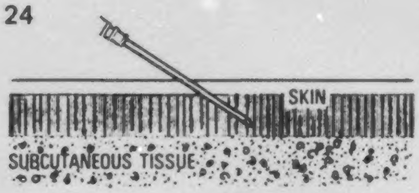
EXAMPLE: Some elderly patients do not have a muscle size that would call for 1" to 1 1/2" needles.

D. Amount of medication

XV. Common methods of administration by injection (Figures 24-26; Job Sheets #5 and #6)

A. Intradermal injection

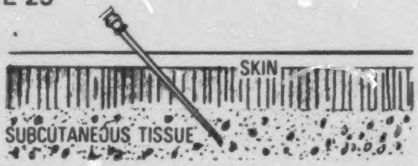
FIGURE 24


SKIN
SUBCUTANEOUS TISSUE

Needle Is Held at a 15-Degree Angle and Inserted into the Dermal Layer

B. Subcutaneous or hypodermic injection

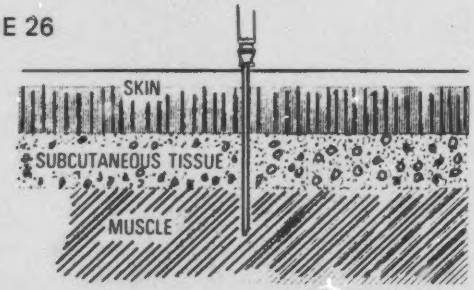
FIGURE 25


SKIN
SUBCUTANEOUS TISSUE

Needle Enters the Skin at a 45-Degree Angle; the Tip Stops in the Subcutaneous Tissue

C. Intramuscular injection

FIGURE 26


SKIN
SUBCUTANEOUS TISSUE
MUSCLE

The Needle Is Inserted at a 90-Degree Angle into the Center of a Muscle

INFORMATION SHEET

XVI. Sites for each method of administration by injection (Figure 27)

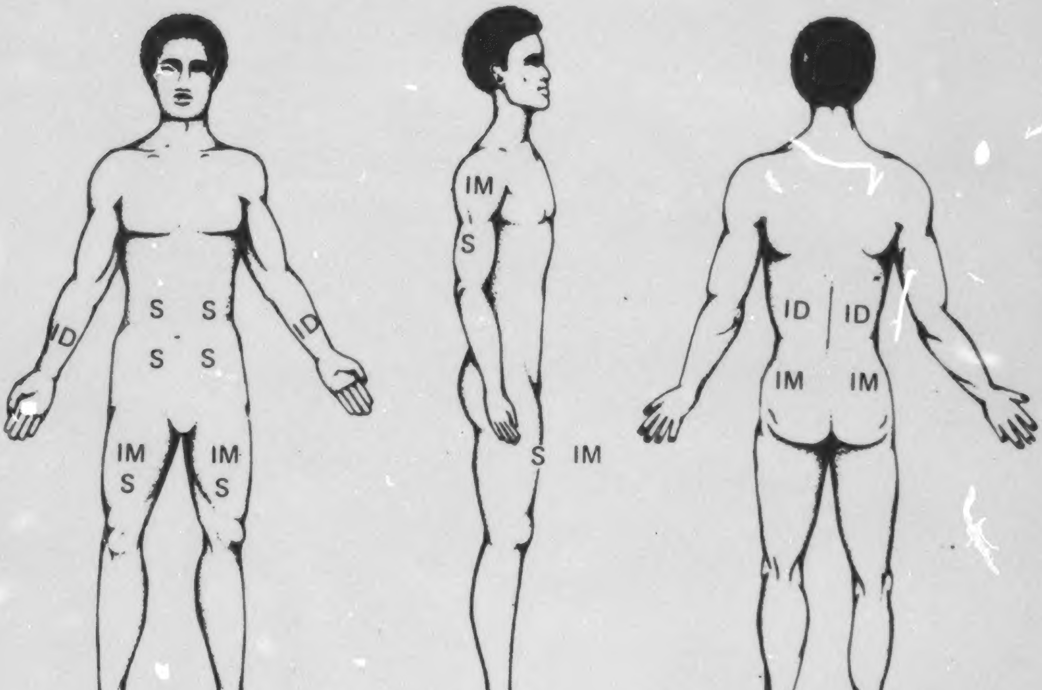
(NOTE: The following are common sites for these types of injections. Others may be used on occasion.)

A. ID--Intradermal

B. S--Subcutaneous

C. IM--Intramuscular

FIGURE 27


ID
S
S
S
S
ID
IM
S
IM
S
IM
S
S
IM
ID
ID
IM
IM

INFORMATION SHEET

XVII. Factors which influence the selection of each method of administration by injection

A. Intradermal

(NOTE: Only a minute amount of solution should be injected at one time.)

1. More rapid effect than by oral administration is desired
2. Oral administration is inappropriate
3. Medication is to be used for diagnostic purposes

B. Subcutaneous

(NOTE: Volume of medication that may be injected at one time is limited to 0.5 ml/cc to 2 ml/cc.)

1. More rapid effect than by oral administration is desired
2. Oral administration is inappropriate

   (NOTE: Oral administration may be inadvisable due to the patient's condition or the effect of the digestive system on the drug.)

3. Accuracy is necessary for small dosages

C. Intramuscular

(NOTE: Parenteral medications may be given in larger doses up to 5 ml/cc.)

1. More rapid effect than by oral administration is desired
2. Oral administration is inappropriate
3. Medication is unsuitable for subcutaneous, intradermal, or intravenous administration

XVIII. Purposes of local applications (Job Sheets #8 and #9)

A. Desensitization

B. Astringent

C. Antiseptic

D. Counterirritant

E. Systemic effect

INFORMATION SHEET

XIX. Types, methods, and purposes of local applications

Type	Method of Application	Some Purposes
Ointments EXAMPLES: Zinc oxide, A and D ointment	Directly on skin or spread on dressings	Relieve irritation, treat local and/or systemic skin diseases
Lotions EXAMPLES: Calamine lotion, body lotion	Swabbed on skin	Antisepsis; astringent; relief of itching, dryness, or irritation
Liniments EXAMPLE: Camphor liniment	Rubbed on skin vigorously	Counterirritant; relief of soreness of muscles and joints
Medicated or wet dressings EXAMPLES: Neomycin solution, saline solution	Material saturated with medicated solution applied to affected area	Antisepsis, astringent, local treatment of skin disorders
Poultices or plasters EXAMPLES: Mustard plaster, flaxseed poultice	Thin layer of drug mixed with resin, wax, or fatty substance and spread on cloth; prepared cloth applied to skin	Counterirritant, relief of pain and congestion in deeper tissues
Irrigations or douches EXAMPLES: Saline solution for nose and throat irrigations; saline, sodium bicarbonate, or hydrogen peroxide for ear irrigations	Flow of solution through an infected wound or organ	Treat infection or inflammation, cleansing of affected part
Instillations EXAMPLES: Eyes-Neosporin opthalmic solution	By dropper, spray, catheter, syringe	For infection and/or inflammation

INFORMATION SHEET

XX. Common purposes of rectal administration

A. To relieve nausea

EXAMPLES: Tigan, Dramamine suppositories

B. As a cathartic

EXAMPLE: Dulcolax suppository

C. To relieve inflammation

EXAMPLE: Anusol HC suppository

D. As a sedative

EXAMPLE: Seconal suppository

E. As an analgesic

EXAMPLE: Xylocaine ointment

F. To soften feces

EXAMPLE: Oil retention enema

G. As an emollient

EXAMPLE: Cornstarch suspension

H. As an antipyretic

EXAMPLE: Tylenol suppositories

XXI. Physiological changes in the aging patient that should be considered when administering medications

(NOTE: It is extremely important to observe the aging patient and the type and dosage of medications being administered. The combination of certain drugs also needs to be monitored. Mental confusion may be the first symptom of which you need to be aware.)

A. Decrease or change in digestive enzymes that slows rate of absorption and transferral from GI tract to bloodstream

B. Decrease in ability of kidneys to excrete drugs that may cause cumulative effect in body

C. Slowing of metabolism that means drug dosages may need to be lowered

D. Changes in circulatory system that may alter or slow specific drugs in reaching target areas and in being transferred systemically

INFORMATION SHEET

XXII. Ways to give medications effectively to the elderly

- A. Explain to patient exactly what you are going to do or what you wish patient to do
- B. Do not hurry the patient
- C. Position patient to facilitate swallowing
- D. Prioritize the administration of medication

  EXAMPLE: If you are to administer a heart medication and a vitamin, it would be best to give the heart medication first if patient is having difficulty in swallowing many pills at one time.

- E. Do not leave medications at bedside unless ordered
- F. Use liquids or semisolid foods as vehicles for medications
- G. Make sure patient has swallowed medication

  (NOTE: Sometimes it is possible to put two pills into a gelatin capsule for a one-pill swallow.)

XXIII. Ways to give medication effectively to children

- A. Ask parents for information concerning child's past experiences with medications
- B. Give honest, simple answers and explanations to children and parents

  (NOTE: *Never* tell a child that the medicine tastes good when it doesn't, or that the injection won't hurt when it will. You will lose the child's trust. *Do not* ask children if they are ready to take their medication; have consistent expectation that they will take it.)

- C. Give oral medications slowly and use appropriate containers such as medicine cups, eyedroppers, needleless syringes for administration
- D. Explain reasons for using restraints
- E. Praise child who has been cooperative
- F. Teach parents and child when possible about the prescribed drug therapy

XXIV. Facts about administration of insulin (Transparency #1; Job Sheet #11)

- A. Use only syringes with markings that correspond to correct strength of insulin to be used
- B. Insulin dosages are always individualized
- C. Insulin, diet, exercise, and condition must be considered to avoid hypoglycemia and/or hyperglycemia

INFORMATION SHEET

D. Site of insulin injection should be rotated so that one site is not used more than once per month (Transparency #1)

(NOTE: One sequence of rotation is accomplished by using site one of each alphabetical area; then begin with site two of each alphabetical area and so on.)

E. Insulin vials should be gently rotated to mix drug

F. All bottles of insulin are marked with an expiration date and should not be used after that date

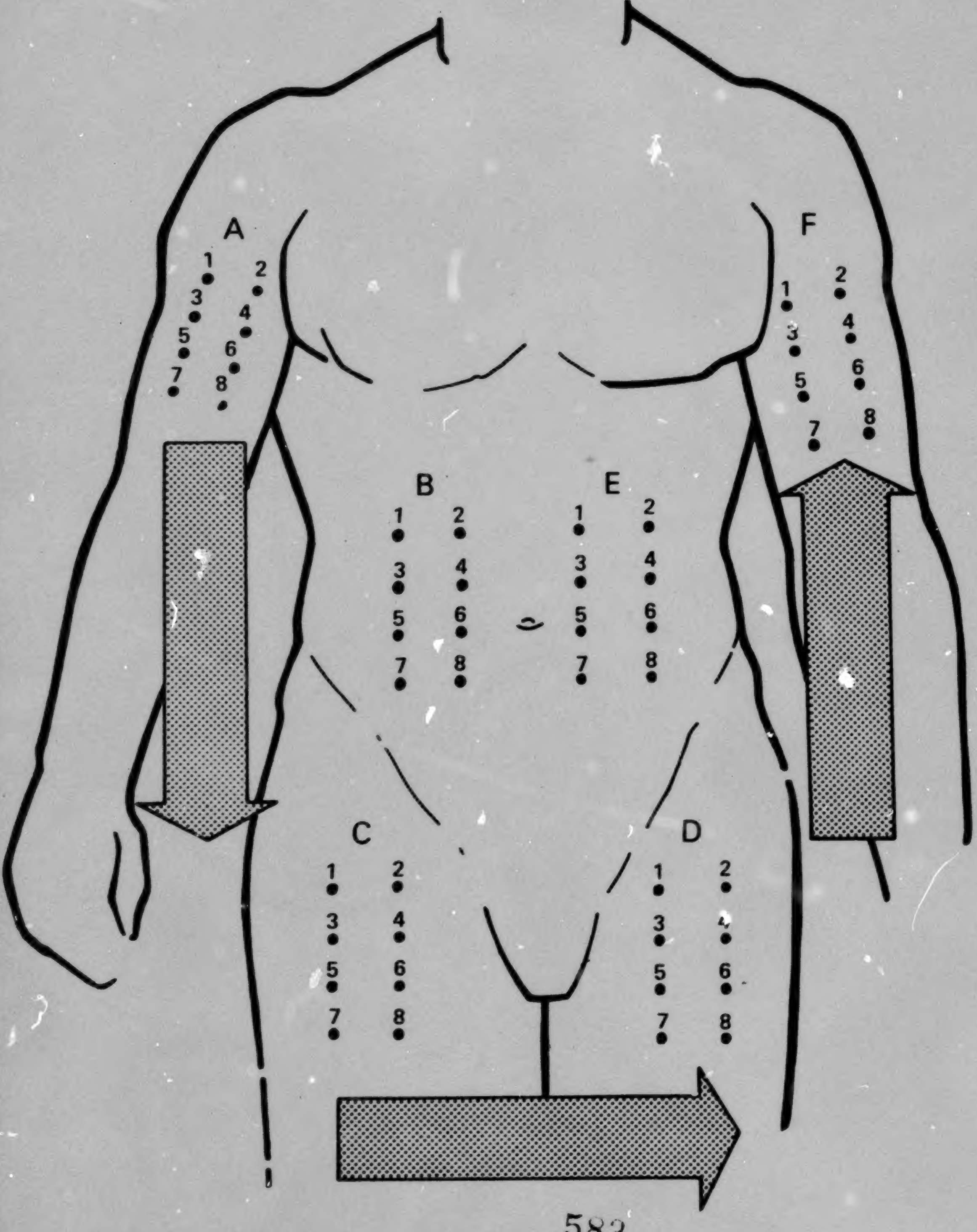
G. Dosage of insulin is adjusted according to amount of glucose in urine and blood and its time of appearance in relation to insulin injections and meals

H. Dosages may be given according to a sliding scale indicated by physician according to urine or blood tests taken at intervals during the day

(NOTE: Urine, preferably the second voided specimen, is usually tested before meals and at bedtime.)

PN II - 181-B

Rotating Insulin Injection Areas


A
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TM #1

PN II - 183-B

ADMINISTRATION OF MEDICATIONS
UNIT IV

ASSIGNMENT SHEET #1--TRANSCRIBE MEDICATION ORDERS FROM DOCTOR'S ORDERS SHEETS TO MEDICATION CARDS OR PATIENT PROFILES

NAME ______________________ SCORE ____________

It is important to be able to read and transcribe medication orders accurately from the order sheets to the medication cards or patient profiles. If you misread or miswrite an order, a very serious error may result. In this assignment sheet, you will be given two doctor's orders sheets, medication cards, and patient profiles to transcribe orders. If you find any errors or questionable orders, DO NOT write in the medication, but fill in the information in the area provided.

PART I

PHYSICIAN'S ORDERS

HEDRICK, SUSAN MARIE
#389403
RM 320 B
Dr. J.R. Uweing

DATE ORDERED	RX	NO.	PHYSICIAN'S ORDERS
4-12-83		1.)	Digoxin 02.5 mg qd
		2.)	Feosol tabs i tid (PO)
		3.)	Equanil 100 mg. (PO) hs
		4.)	Lasix 40 mg. bid (PO)
			JR Uweing MD
4-26-83		1.)	D.C. Lasix
		2.)	Vibramycin 200 mg (PO) initially
			the first day - divide into 2
			dosages then Vibramycin
			100 mg qd (PO)
			JR Uweing M.D.

ASSIGNMENT SHEET #1

NAME
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PN II - 185-B

ASSIGNMENT SHEET #1

ALLERGIES: ______________________________

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Adm. Date:	Time:						
DATE ORDERED	MEDICATIONS AMOUNT	METH.	7-3	3-11	11-7	D.C.	FLUIDS
							I. & O.
							CATH
							PRN MED.
							1.
							2.
							3.
							4.
OPERATION							DIET
DIAGNOSIS							SERVICE
ROOM	PATIENT						AGE RELIGION

Questionable orders-- ______________________________

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Way you would handle each of the above-- ______________________________

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186-B

ASSIGNMENT SHEET #1

PART II

REID, LAVINA FAE
#552023
RM 403
Dr. Robert Holbrook

PHYSICIAN'S ORDERS

DATE ORDERED	R X	NO.	PHYSICIAN'S ORDERS
8-9-83		1)	Orinase 2 G Daily (PO)
		2.)	Diabetic UA Ac
		3.)	Notify Dietician for consult
		4.)	Zomax 100 mg q 3-4 hr pain (PO)
		5.)	Dalmane 15mg (PO) HS if needed
		6.)	Lasix 180mg (Solution) (PO) now
		7.)	Cortisone (1%) ointment to (R) leg
			ulcerations x2 daily
		8.)	Keflex 250 mg q̄ 6 hr (PO)
			R. Holbrook

PN II - 187-B

ASSIGNMENT SHEET #1

PATIENT PROFILE

ALLERGIES Egg, Milk, Penicillin

ROUTINE MEDICATIONS						
DATE ORDERED	MEDICATION ROUTE	DOSE FREQUENCY	TIMES TO GIVE	DATE		
			7-3			
RENEW			3-11			
			11-7			
			7-3			
			3-11			
			11-7			
			7-3			
			3-11			
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			7-3			
			3-11			
			11-7			

ROOM	NAME	DOCTOR

Used with permission of Fenton Office Supply Company, Stillwater, Oklahoma.

ASSIGNMENT SHEET #1

Questionable orders--

Way you would handle each of the above--

ADMINISTRATION OF MEDICATIONS
UNIT IV

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

ADMINISTRATION OF MEDICATIONS
UNIT IV

JOB SHEET #1--READ A MEDICINE GLASS

I. Equipment

   A. Medicine glass

   B. Colored liquid

II. Procedure

   A. Find ml or cc marking

   B. Place thumbnail at 5 ml/cc mark

   C. Turn glass to find tsp (teaspoon)

   D. Place thumbnail at 1 teaspoon mark

   E. Note that 5 ml/cc and 1 tsp are at the same level

   F. Place thumbnail at 2 teaspoon mark

   G. Locate oz measurement

   H. Place thumbnail on 1/2 ounce line

   I. Note that 1/2 oz is the same as 15 ml/cc

   J. Place thumbnail on 1 ounce line

   K. Note that 30 ml/cc is the same as 1 oz

   L. Find the following measurements: 10 ml/cc, 20 ml/cc, 25 ml/cc, 30 ml/cc

   M. Find the following measurements: 1/4 oz, 1/2 oz, 3/4 oz, 1 oz

   N. Find tbs (tablespoon) mark

   O. Place thumbnail on 2 tablespoons mark

   P. Turn glass until tsp (teaspoon) mark appears; how many teaspoons make 2 tablespoons? How many teaspoons make 1 tablespoon?

   Q. Pour 2 teaspoons of water in medicine glass

   R. Hold medicine glass at eye level to find meniscus

   (NOTE: The reading of the dose of liquid medicine is always made at the lowest point of the curve of the meniscus.)

JOB SHEET #1

III. Checklist for reading a medicine glass

		Performed Well	Needs Improvement
A.	Found ml or cc marking	☐	☐
B.	Placed thumbnail at 5 ml/cc mark	☐	☐
C.	Turned glass to find tsp (teaspoon)	☐	☐
D.	Placed thumbnail at 1 teaspoon mark	☐	☐
E.	Noted that 5 ml/cc and 1 tsp are at the same level	☐	☐
F.	Placed thumbnail at 2 teaspoon mark	☐	☐
G.	Located oz measurement	☐	☐
H.	Placed thumbnail on ½ ounce line	☐	☐
I.	Noted that ½ oz is the same as 15 ml/cc	☐	☐
J.	Placed thumbnail on 1 ounce line	☐	☐
K.	Noted that 30 ml/cc is the same as 1 oz	☐	☐
L.	Found the following measurements: 10 ml/cc, 20 ml/cc, 25 ml/cc, 30 ml/cc	☐	☐
M.	Found the following measurements: ¼ oz, ½ oz, ¾ oz, 1 oz	☐	☐
N.	Found the tbs (tablespoon) mark	☐	☐
O.	Placed thumbnail on 2 tablespoons mark	☐	☐

Comments: ____

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JOB SHEET #1

		Performed Well	Needs Improvement
P.	Turned glass until tsp (teaspoon) mark appeared; how many teaspoons make 2 tablespoons? How many teaspoons make 1 tablespoon?	☐	☐
Q.	Poured out 2 teaspoons of water in medicine glass	☐	☐
R.	Held medicine glass at eye level to find meniscus	☐	☐

Comments: ____

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ADMINISTRATION OF MEDICATIONS
UNIT IV

JOB SHEET #2--USE A SYRINGE

(CAUTION: This simulated procedure need not be practiced using sterile technique. It should be emphasized, however, that sterility of medication, needles, and syringe is absolutely necessary whenever an injection is given.)

I. Equipment

  A. Syringes, various sizes for comparison

  B. Syringe (2 1/2 or 3 ml/cc size), one for each student

  C. Needle, one for each student

  D. Vials of solution

II. Procedure

  A. Identify parts of syringe

    1. Barrel

    2. Plunger

    3. Scales or calibrations

    4. Tip or hub

  B. Assemble syringe

  C. Observe scales or markings on syringe

    1. Locate first long line, the 1 ml/cc mark

    2. Count the short lines between tip end of barrel and 1 ml/cc mark

    How much does each mark indicate?______________________________

  D. Compare various sizes of syringes

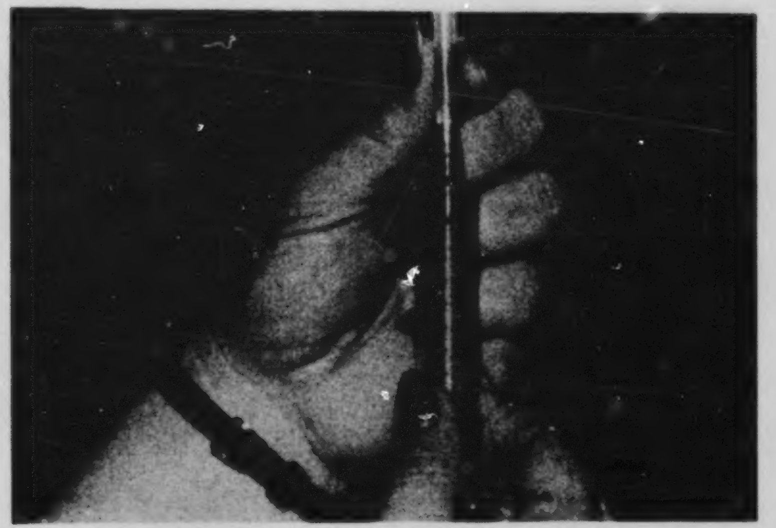
  Do the marks always indicate the same amount?________________________

JOB SHEET #2

E. Place a needle on syringe (Figure 28)

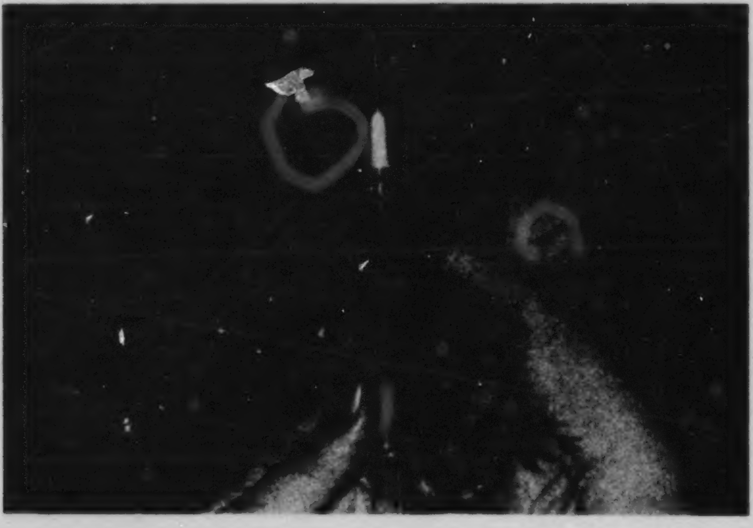
(NOTE: *Always* be sure to check needles for any burrs.)

FIGURE 28



F. Pull plunger to marks indicating 1.4 ml/cc, 1.5 ml/cc, 0.6 ml/cc, and 2 ml/cc (Figure 29)

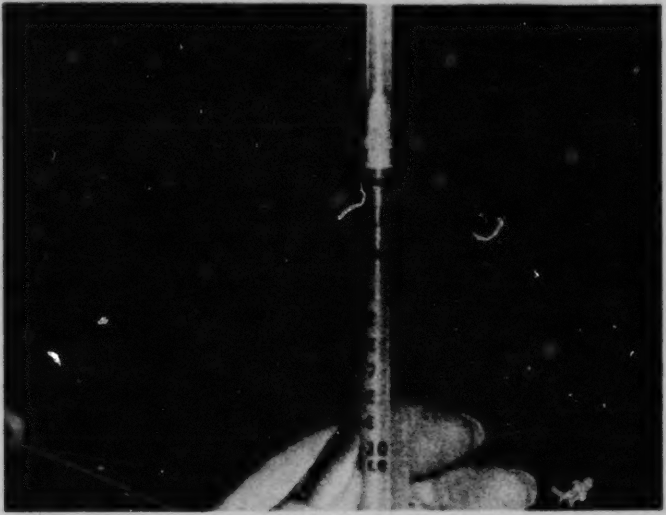
FIGURE 29



JOB SHEET #2

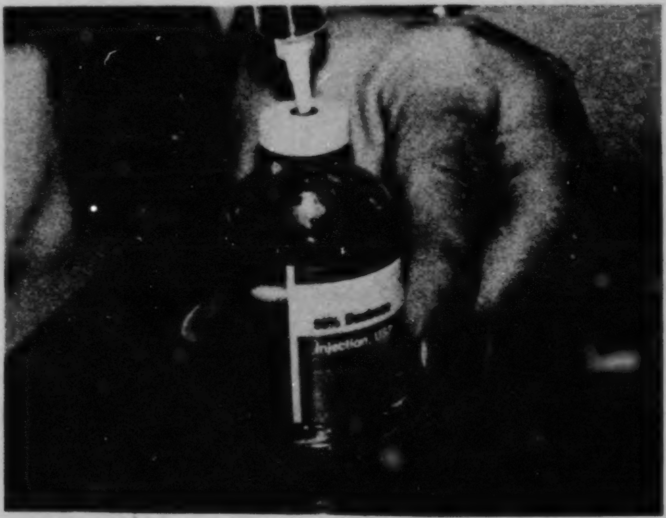
G. Pull plunger back to 1 ml/cc mark (Figure 30)

FIGURE 30



H. Inject 1 ml/cc of air into a vial (Figure 31)

FIGURE 31

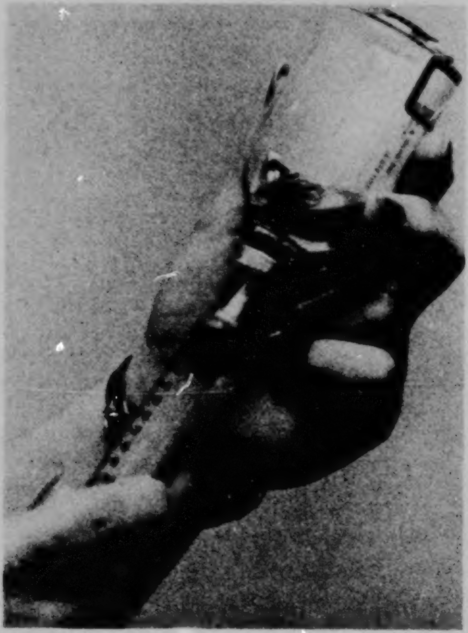


JOB SHEET #2

I. Invert vial and withdraw 1 ml/cc of fluid (Figure 32)

(NOTE: Introducing a volume of air equal to the volume of solution to be withdrawn increases the pressure within the vial, making withdrawal of an accurate amount easier.)

FIGURE 32



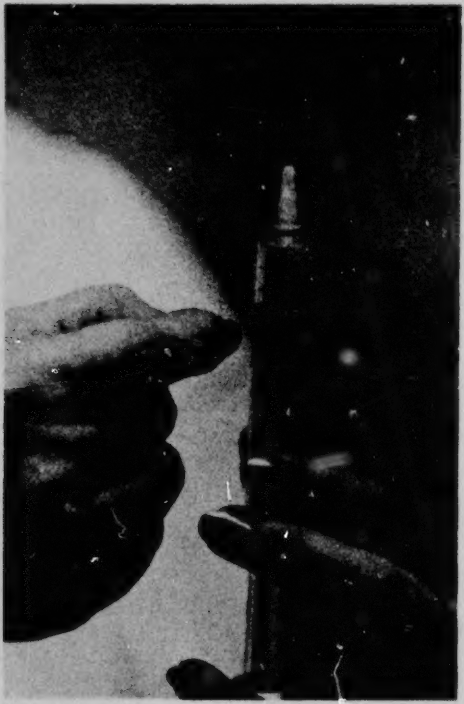
J. Reinvert vial and syringe and remove needle from vial

JOB SHEET #2

K. Expel any air from syringe (Figure 33)

(NOTE: When drawing up medication to be given, expel any air from syringe to validate amount of medication. Then pull back approximately 0.1 to 0.2 ml/cc of air. This small amount of air will help clear medication from needle and seal medication in tissue.)

FIGURE 33



L. Discard practice solution

(NOTE: Expel into sink or other container.)

M. Practice drawing other amounts into syringe

N. Dispose of used equipment as instructed when finished

JOB SHEET #2

III. Checklist for using a syringe

		Performed Well	Needs Improvement
A.	Identified parts of a syringe	☐	☐
B.	Assembled syringe	☐	☐
C.	Observed scales or markings on syringe	☐	☐
D.	Pulled plunger to marks indicating 1.4 ml/cc, 1.5 ml/cc, 0.6 ml/cc, and 2 ml/cc	☐	☐
E.	Compared the various sizes of syringes	☐	☐
F.	Placed needle on a syringe correctly	☐	☐
G.	Pulled plunger back to 1 ml/cc mark	☐	☐
H.	Injected 1 ml/cc of air into a vial	☐	☐
I.	Inverted vial and withdrew 1 ml/cc of fluid	☐	☐
J.	Reinverted vial and syringe and removed needle from vial	☐	☐
K.	Expelled any air from syringe	☐	☐
L.	Discarded practice solution	☐	☐
M.	Practiced drawing up other amounts of fluid given by instructor	☐	☐
N.	Disposed of used equipment as instructed	☐	☐

Comments: ____

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ADMINISTRATION OF MEDICATIONS
UNIT IV

JOB SHEET #3--PREPARE AN INJECTION FROM A VIAL AND AN AMPULE

I. Equipment

   A. Syringe and needle

   B. Vial and ampule of medication, one each for each student

      (NOTE: Vials may be multiple-dose or single-dose. If using multiple-dose vial, be sure measurement and dosage of solution are correct.)

   C. Cotton balls or sponges

   D. Disinfectant solution

II. Procedure using a vial

   A. Obtain medication

   B. Compute dosage if necessary

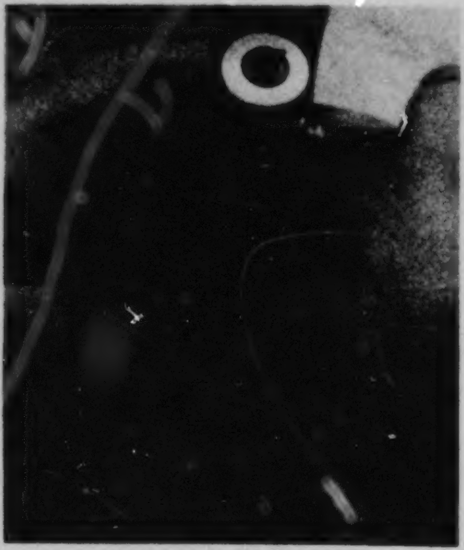
   C. Wash hands

   D. Assemble equipment

   E. Remove cover of vial if necessary

   F. Cleanse rubber stopper with an alcohol sponge (Figure 34)

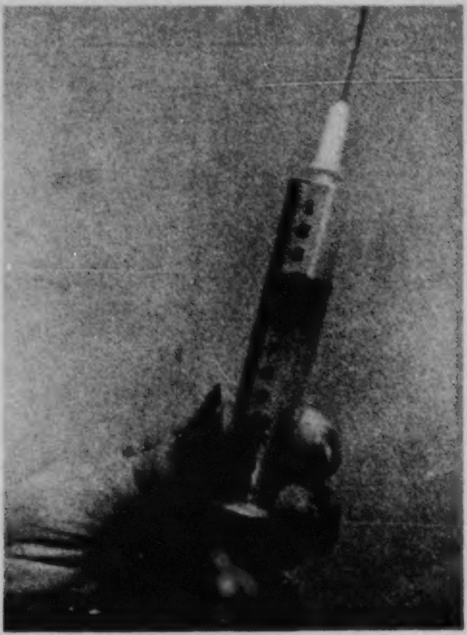
FIGURE 34



JOB SHEET #3

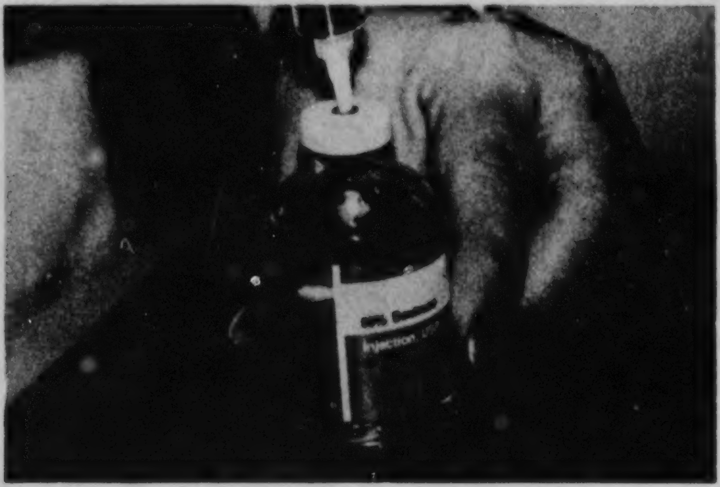
G. Draw air equal to desired dosage into syringe (Figure 35)

FIGURE 35



H. Insert needle into rubber stopper of vial (Figure 36)

FIGURE 36

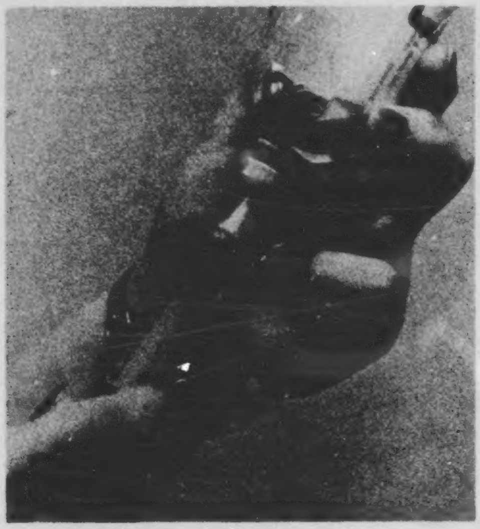


JOB SHEET #3

I. Push air from syringe into vial but not into solution

J. Invert vial and withdraw desired dosage, making sure needle is below level of solution (Figure 37)

FIGURE 37

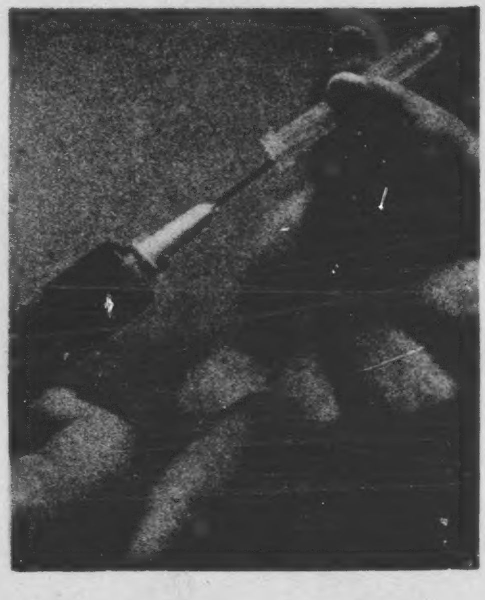


K. Withdraw needle from rubber stopper

L. Remove air bubble from syringe

M. Cover needle (Figure 38)

FIGURE 38



JOB SHEET #3

N. Take additional alcohol sponges with you when you are ready to administer the medication

(NOTE: *Never* leave a syringe and needle unattended.)

III. Procedure using an ampule

A. Obtain medication

B. Compute dosage if necessary

C. Wash hands

D. Assemble equipment

E. Tap top of ampule to cause solution to collect in body of ampule (Figure 39)

FIGURE 39

JOB SHEET #3

F. Break off top of ampule at area of constriction (Figure 40)

(NOTE: Some ampules may need to be filed at the breaking line; others are prescored. Protect fingers from cutting by holding ampule in an alcohol sponge or sterile 2 x 2.)

(CAUTION: Check to see if edges have broken evenly and check for any glass particles that may have broken off into solution.)

FIGURE 40

JOB SHEET #3

G. Withdraw solution from ampule without injecting air (Figure 41)

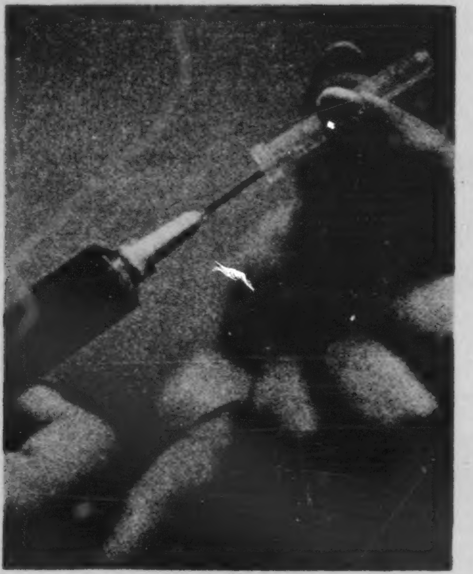
(NOTE: If needle is not long enough to reach the bottom of the ampule, it may be necessary to hold ampule in horizontal position or to invert it to get the required dosage. If not all of solution is used, remainder should be discarded. See Figure 41.)

FIGURE 41

JOB SHEET #3

H. Cover needle (Figure 42)

FIGURE 42



I. Take additional alcohol sponges with you when you are ready to administer the medication

JOB SHEET #3

IV. Checklist for preparing an injection from a vial and an ampule

	Performed Well	Needs Improvement
A. Vial		
1. Obtained medication	☐	☐
2. Computed dosage if necessary	☐	☐
3. Washed hands; assembled equipment	☐	☐
4. Removed cover of vial if necessary	☐	☐
5. Cleansed rubber stopper with an alcohol sponge	☐	☐
6. Drew air equal to desired dosage into syringe	☐	☐
7. Inserted needle into rubber stopper of vial	☐	☐
8. Pushed air from syringe into vial but not into solution	☐	☐
9. Inverted vial and withdrew dosage, making sure needle was below level of solution	☐	☐
10. Withdrew needle from rubber stopper	☐	☐
11. Removed air bubble from syringe	☐	☐

Comments: ______________________________

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JOB SHEET #3

		Performed Well	Needs Improvement
12.	Covered needle	☐	☐
13.	Took additional alcohol sponges when ready to administer medication	☐	☐

Comments: ______________________________

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JOB SHEET #3

	Performed Well	Needs Improvement
B. Ampule		
1. Obtained medication	☐	☐
2. Computed dosage if necessary	☐	☐
3. Washed hands; assembled equipment	☐	☐
4. Tapped top of ampule to cause solution to collect in body of ampule	☐	☐
5. Broke off top of ampule at area of constriction	☐	☐
6. Withdrew solution from ampule without injecting air	☐	☐
7. Covered needle	☐	☐
8. Took additional alcohol sponges when ready to administer medication	☐	☐

Comments:

ADMINISTRATION OF MEDICATIONS
UNIT IV

JOB SHEET #4--USE A CARTRIDGE SYRINGE

I. Equipment

A. Metal cartridge syringe

(NOTE: Some companies manufacture plastic cartridge syringes. Basic principles of use apply to any cartridge system.)

B. Cartridge of medication

C. Cotton balls or sponges

D. Antiseptic solution

II. Procedure

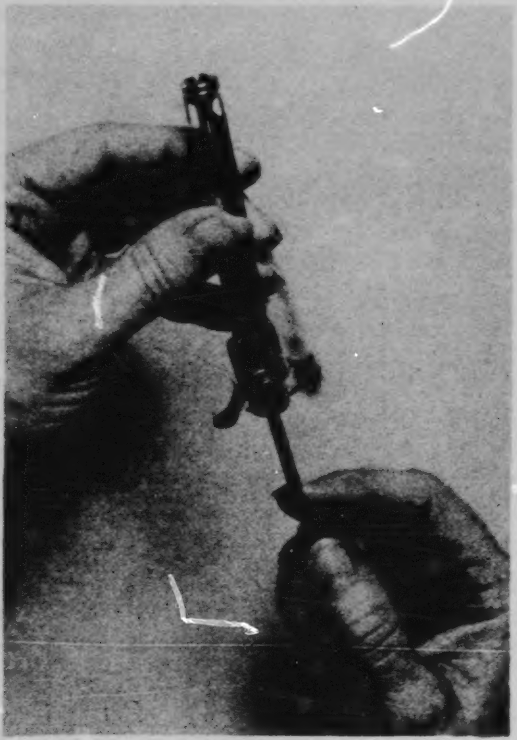
A. Compute dosage if necessary

B. Wash hands

C. Assemble equipment

D. Hold barrel of syringe and withdraw plunger (Figure 43)

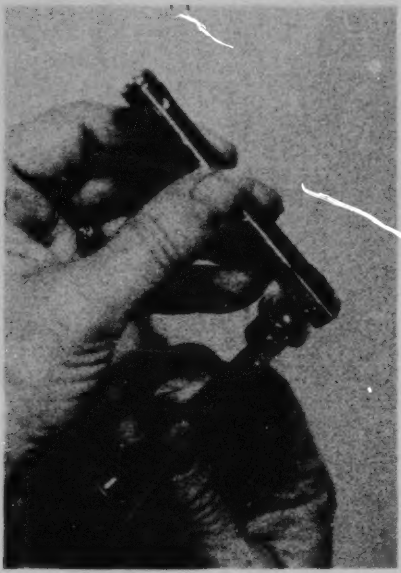
FIGURE 43



JOB SHEET #4

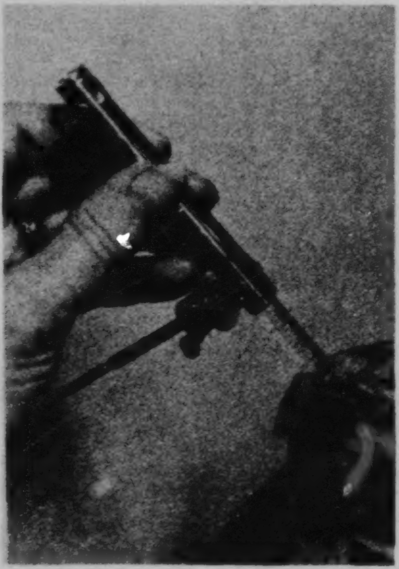
E. Pull plunger down until it is at a right angle to barrel (Figure 44)

FIGURE 44



F. Insert sterile cartridge into barrel, needle end first (Figure 45)

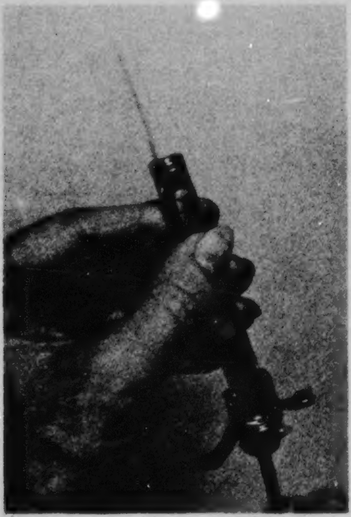
FIGURE 45



JOB SHEET #4

G. Turn cartridge in clockwise direction until it is secured into needle end of barrel (Figure 46)

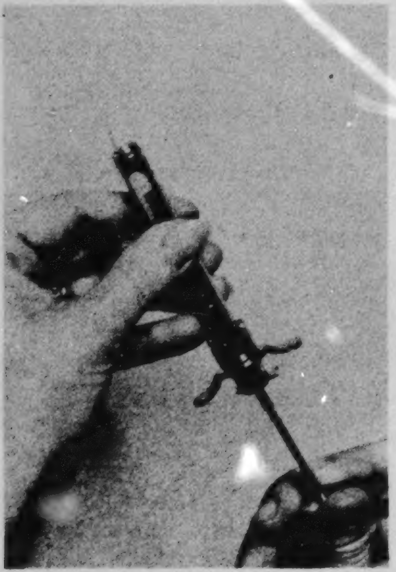
FIGURE 46



H. Swing plunger back into place, and twist plunger onto threaded shaft of cartridge piston (Figure 47)

(CAUTION: Do not overtighten.)

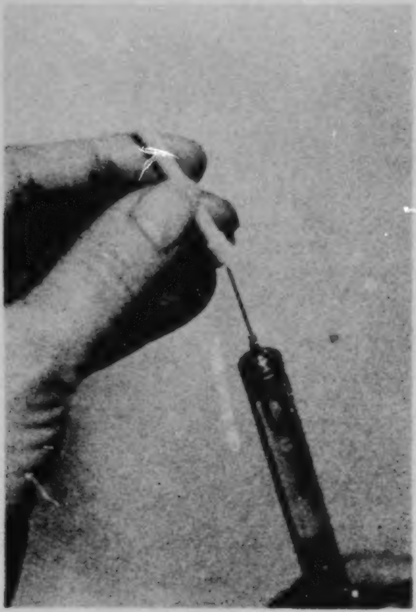
FIGURE 47



JOB SHEET #4

I. Remove rubber sheath from needle just prior to injection (Figure 48)

FIGURE 48



J. Pull back slightly on plunger to aspirate before injection

K. Replace sheath on needle immediately after administering injection

L. Disengage plunger by rotating counterclockwise

M. Pull plunger out and down at a right angle

N. Rotate cartridge counterclockwise to disengage at needle end of barrel

O. Remove cartridge from barrel

P. Bend needle back and forth on hub until it snaps

Q. Discard both cartridge and sheath-protected needle

R. Replace equipment

S. Wash hands

T. Chart procedure

JOB SHEET #4

III. Checklist for using a cartridge syringe

		Performed Well	Needs Improvement
A.	Computed dosage if necessary	☐	☐
B.	Washed hands; assembled equipment	☐	☐
C.	Held barrel of syringe and withdrew plunger	☐	☐
D.	Pulled plunger down until it was at a right angle to the barrel	☐	☐
E.	Inserted sterile cartridge into barrel, needle end first	☐	☐
F.	Turned cartridge in a clockwise direction until it was secured into the needle end of the barrel	☐	☐
G.	Swung plunger back into place and twisted plunger onto threaded shaft of cartridge piston	☐	☐
H.	Removed rubber sheath from needle just prior to injection	☐	☐
I.	Pulled back slightly on plunger to aspirate before injection	☐	☐
J.	Replaced sheath on needle immediately after administering injection	☐	☐
K.	Disengaged plunger by rotating counterclockwise	☐	☐

Comments: ____

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JOB SHEET #4

		Performed Well	Needs Improvement
L.	Pulled plunger out and down at a right angle	☐	☐
M.	Rotated cartridge counterclockwise to disengage at needle end of barrel	☐	☐
N.	Removed cartridge from barrel	☐	☐
O.	Bent needle back and forth on hub until it snapped	☐	☐
P.	Discarded both cartridge and sheath-protected needle	☐	☐
Q.	Replaced equipment	☐	☐
R.	Washed hands; charted procedure	☐	☐

Comments: ____

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ADMINISTRATION OF MEDICATIONS
UNIT IV

JOB SHEET #5--LOCATE INTRAMUSCULAR INJECTION SITES (ADULTS AND CHILDREN)

I. Procedure for deltoid area

A. Remove patient's clothing as needed

(NOTE: The deltoid area cannot be satisfactorily exposed by rolling up the sleeve.)

B. Palpate the acromion process

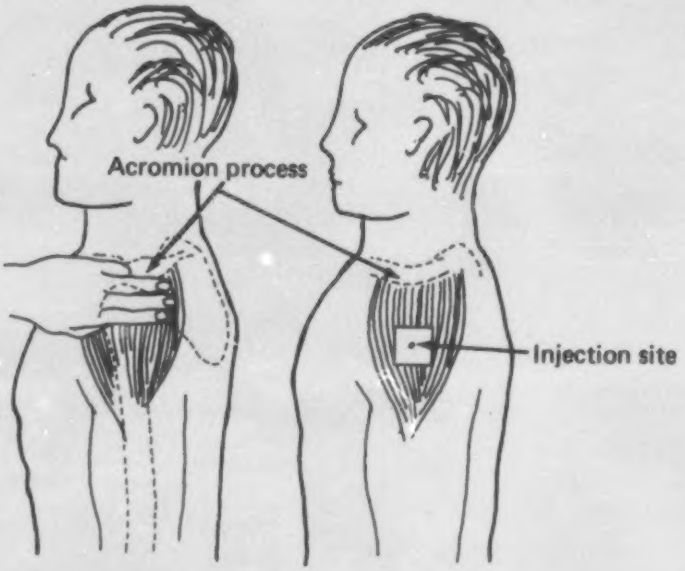
(NOTE: The acromion process is the lateral, triangular projection of the spine of the scapula which forms the point of the shoulder.)

C. Measure two or three fingerbreadths below the acromion process

D. Locate the injection site below the fingers but above the groove inferior to the deltoid (Figure 49)

(CAUTION: An injection into the middle or lower third of the arm should be avoided because it might injure the radial nerve.)

FIGURE 49



JOB SHEET #5

II. Procedure for posterior gluteal area

A. Position patient on abdomen with toes turned inward if possible

B. Expose gluteal area

C. Palpate glutaal landmarks

1. Superior--Iliac crest

2. Inferior--Gluteal fold

3. Medial--Division between buttocks

4. Lateral--Anterior iliac spine; the greater trochanter

(NOTE: The greater trochanter is the process on the femur at the upper end of its lateral surface.)

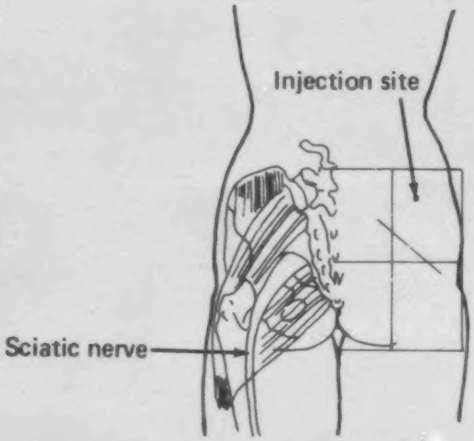
D. Divide gluteal area into four quadrants

E. Visualize a line from the posterior superior iliac crest to the greater trochanter

F. Locate injection site in upper, outer quadrant, superior to line drawn from iliac crest to greater trochanter (Figure 50)

(CAUTION: This injection site is located to avoid damage to the sciatic nerve.)

FIGURE 50



JOB SHEET #5

III. Procedure for lateral thigh in vastus lateralis

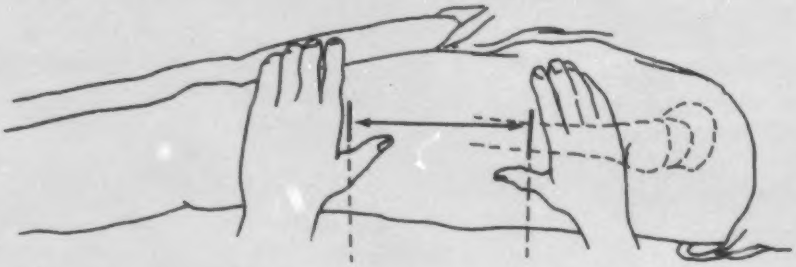
A. Place patient on back or in sitting position

B. Explore lateral side of thigh from greater trochanter to knee

C. Palpate greater trochanter

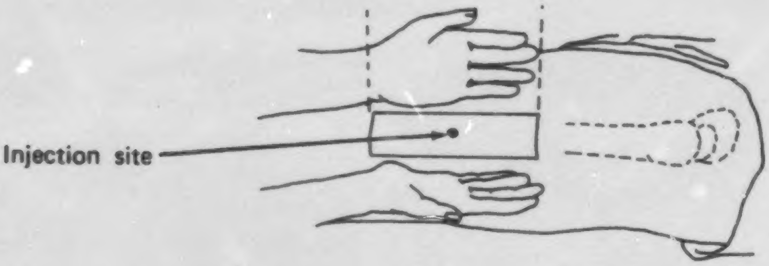
D. Measure distance one handbreadth below greater trochanter and one handbreadth above knee; place one hand on midanterior thigh, the other on midlateral thigh (Figure 51)

FIGURE 51



E. Locate injection site between hands (Figure 52)

FIGURE 52



JOB SHEET #5

IV. Procedure for ventrogluteal site

A. Place patient on back or abdomen

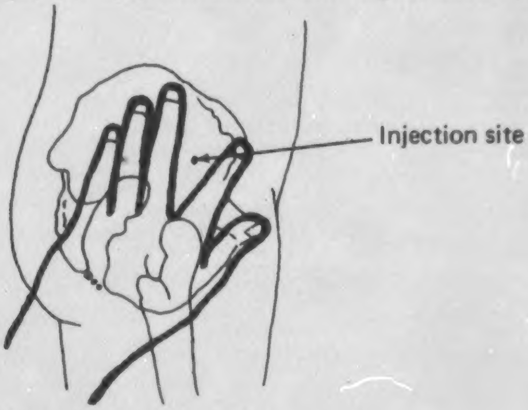
B. Locate right ventrogluteal muscle

1. Place left hand with tip of index finger on right anterior superior iliac spine, fingers pointing toward patient's chest

2. Spread index and middle fingers as far apart as possible, forming a "V"

C. Locate injection site between the two fingers, below iliac crest (Figure 53)

FIGURE 53



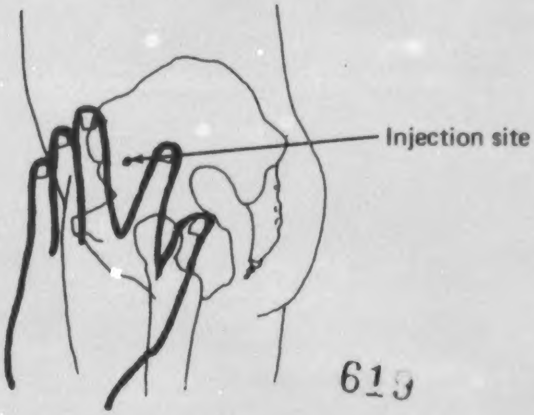
D. Locate left ventrogluteal muscle

1. Place middle finger of left hand on left anterior superior iliac

2. Separate index and middle fingers to form a "V"

E. Locate injection site between the two fingers (Figure 54)

FIGURE 54



JOB SHEET #5

(NOTE: Use the following chart as a guideline when locating sites for injections for children.)

GUIDELINES FOR SITE SELECTION FOR CHILDREN

Nursing Action	Rationale
1. Assess the child's muscle development and select a needle that is long enough to reach the belly of the muscle you plan to inject.	The child's muscle mass, not age, should be used as a guide since a number of factors can affect muscle development.
2. Select a site: Vastus lateralis--The belly of the muscle is one-third of the distance between the greater trochanter and the knee. The muscle mass should be compressed in the nurse's grasp and the needle inserted at a 90-degree angle.	This is the preferred site for infants and young children. The muscle mass is well developed at birth and there are no major nerves and blood vessels in the area.
Ventrogluteal--Palpate the anterior iliac spine, iliac crest, and greater trochanter of the femur. The injection is given within the triangle formed by these landmarks. The needle angle should be 90 degrees.	This is also a good choice for children, since the landmarks are easily identified, the muscle mass is developed, there are no major nerves or blood vessels in the area, and the child can be prone, supine, standing, or in the dorsal recumbent position.
Deltoid--The safe area for injection is a rectangle bound by the acromion process on the top and a point opposite the axilla on the bottom. Compress the muscle mass and insert the needle slightly upward toward the shoulder.	This site can be used for older children who receive small volumes of medication.
Anterolateral thigh--The anterolateral surface of the upper thigh is injected with the needle inserted at a 45-degree angle in the direction of the knee.	This site may be used when the above sites are unavailable.
Gluteus maximus--The nurse must be accurate in identifying landmarks to avoid major nerves and vessels. The injection site is superior and lateral to an imaginary line connecting the posterior superior iliac spine and the greater trochanter. The needle should be inserted at a 90-degree angle.	This site should not be used until the child has been walking for a year or more; until this time the muscle mass is small and the sciatic nerve is close to the injection site.
3. Select an area of the site which is not overly sensitive. (Extra-sensitive areas will twitch when the muscle mass is rolled under the fingers.)	Referred or sharp pain may occur if sensitive areas are injected.

Adapted from *Guide to Pediatric Nursing: A Clinical Reference* by Marilyn L. Evans and Beverly D. Hansen. New York: Appleton-Century-Crofts, 1980.

JOB SHEET #5

V. Checklist for locating intramuscular injection sites (adult and children)

	Performed Well	Needs Improvement
A. Deltoid area		
1. Removed patient's clothing as needed	☐	☐
2. Palpated the acromion process	☐	☐
3. Measured two or three fingerbreadths below the acromion process	☐	☐
4. Located the injection site below the fingers but above the groove inferior to the deltoid	☐	☐

Comments: ____

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JOB SHEET #5

	Performed Well	Needs Improvement
B. Posterior gluteal area		
1. Positioned patient on abdomen with toes turned inward if possible	☐	☐
2. Exposed gluteal area	☐	☐
3. Palpated the gluteal landmarks	☐	☐
4. Divided the gluteal area into four quadrants	☐	☐
5. Visualized a line from the posterior superior iliac crest to the greater trochanter	☐	☐
6. Located injection site in the upper, outer quadrant, superior to the line drawn from the iliac crest to the greater trochanter	☐	☐

Comments: ____

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JOB SHEET #5

	Performed Well	Needs improvement
C. Lateral thigh in vastus lateralis		
1. Placed patient on back or in sitting position	☐	☐
2. Explored lateral side of thigh from the greater trochanter to the knee	☐	☐
3. Palpated greater trochanter	☐	☐
4. Measured distance one handbreadth below the greater trochanter and one handbreadth above the knee; placed one hand on the midanterior thigh; the other on the midlateral thigh	☐	☐
5. Located injection site between hands	☐	☐

Comments:

JOB SHEET #5

		Performed Well	Needs Improvement
D.	Ventrogluteal site		
1.	Placed patient on back or abdomen	☐	☐
2.	Located the right ventrogluteal muscle	☐	☐
3.	Placed the left hand with the tip of the index finger on the right anterior superior iliac spine, with fingers pointing toward the patient's chest	☐	☐
4.	Spread the index and middle fingers as far apart as possible, forming a "V"	☐	☐
5.	Located injection site between the two fingers, below the iliac crest	☐	☐
6.	Located the left ventrogluteal muscle	☐	☐
7.	Placed the middle finger of the left hand on the left anterior superior iliac	☐	☐
8.	Separated index and middle fingers to form a "V"	☐	☐
9.	Located injection site between the two fingers	☐	☐

Comments: ____

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ADMINISTRATION OF MEDICATIONS
UNIT IV

JOB SHEET #6–ADMINISTER INJECTIONS (ADULTS AND CHILDREN)

I. Equipment

   A. Sterile syringes, correct size for medication to be given

   B. Needles, correct size to suit amount of medication and method of administration

   C. Medication as ordered

   D. Cotton balls or pledgets with disinfectant

II. Preparation for all injections

   A. Check label of medication with the order

   B. Compute dosage if necessary

   C. Wash hands

   D. Read label and prepare medication for appropriate injection

   E. Read label as medication container is returned to proper place

   F. Identify patient

   G. Explain procedure to patient

   H. Provide privacy

   I. Position patient as needed

III. Procedure for giving an intradermal injection

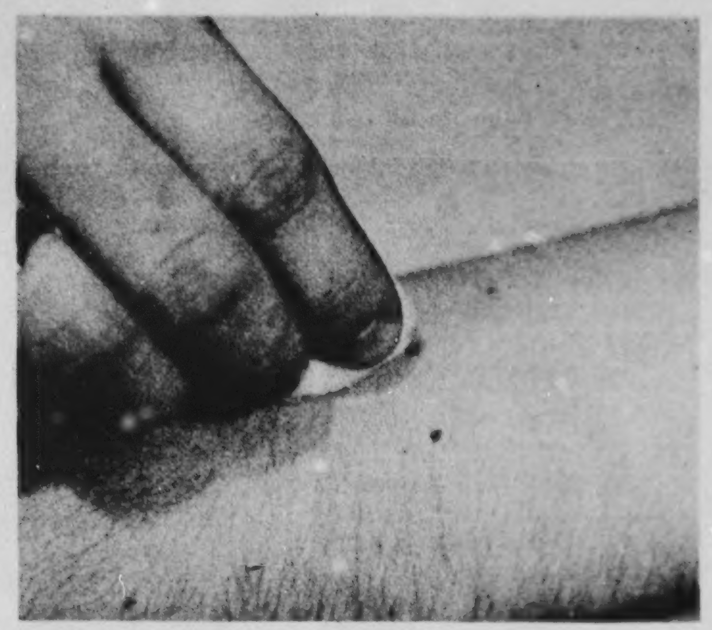
(NOTE: The usual site for an intradermal injection is the ventral surface of the forearm.)

   A. Make sure correct amount of medication has been drawn up

JOB SHEET #6

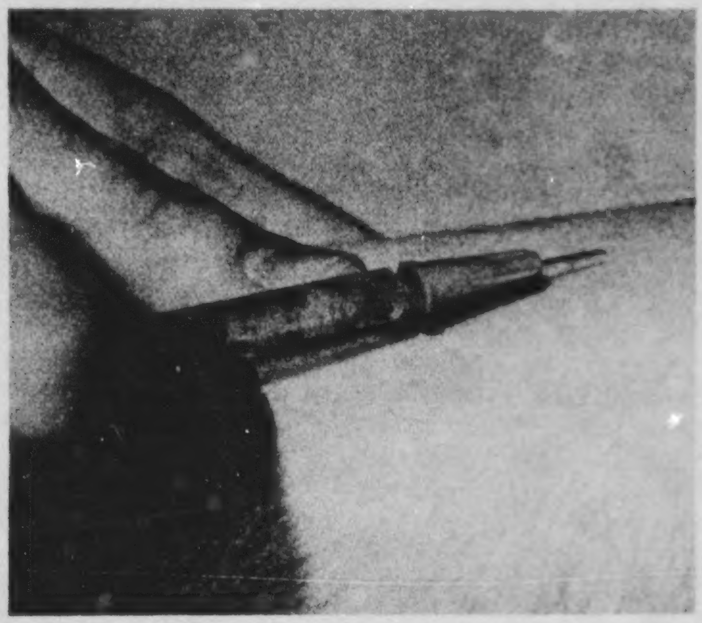
B. Cleanse the injection site (Figure 55)

FIGURE 55



C. Hold skin taut by grasping posterior surface of patient's arm, with your hand encircling arm (Figure 56)

FIGURE 56



JOB SHEET #6

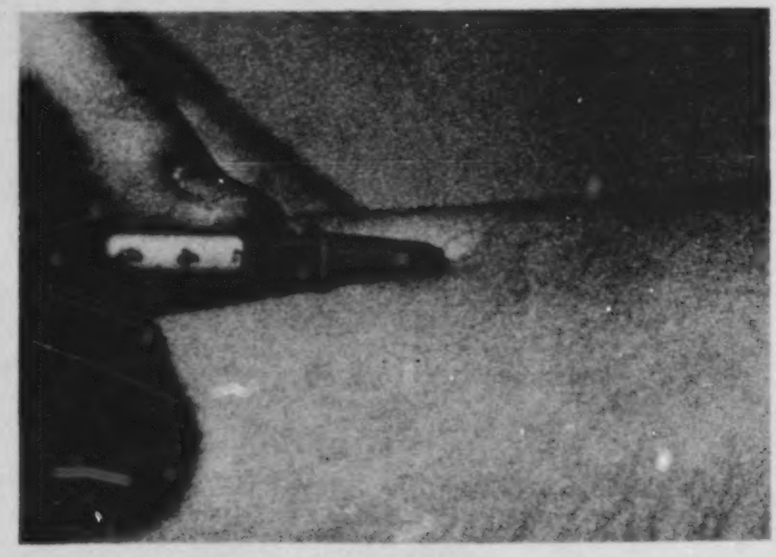
D. Insert needle, bevel up, directly under skin at an angle of 15 degrees (Figure 57)

FIGURE 57

E. Inject prescribed amount of medication slowly and as gently as possible (Figure 58)

(NOTE: A wheel will develop.)

FIGURE 58



F. Withdraw needle and apply gentle pressure to site

(CAUTION: Do not massage the site.)

G. Dispose of equipment

H. Document procedure

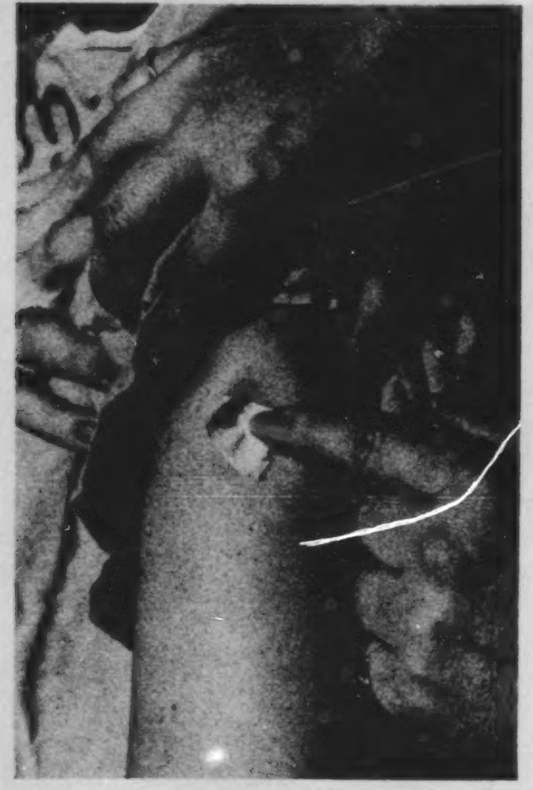
IV. Procedure for giving a subcutaneous or hypodermic injection

(NOTE: The sites most used for subcutaneous injections are the lateral surface of the upper arm and the anterior or lateral portion of the thigh.)

A. Make sure that correct amount of medication has been drawn up

B. Cleanse injection site with alcohol sponge: using a circular motion, start at center and extend out to cleanse approximately a two-inch area (Figure 59)

FIGURE 59



JOB SHEET #6

C. Pinch up the skin (Figure 60)

FIGURE 60

D. Quickly insert needle at a 45° to 60° angle to the skin (Figure 61)

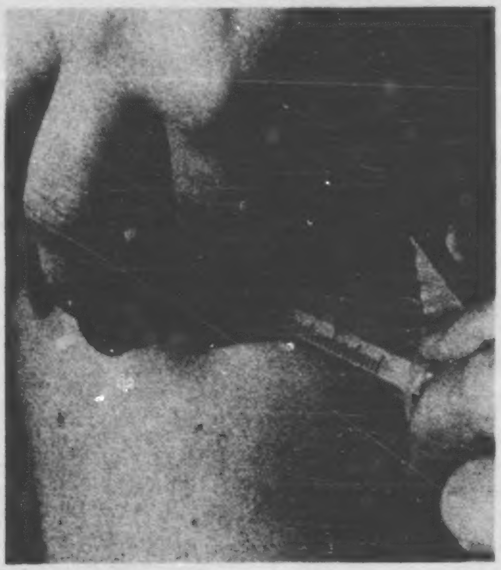
FIGURE 61

JOB SHEET #6

E. Release skin and pull back (aspirate) on plunger to be sure tip of needle is not in a vein (Figure 62)

(CAUTION: If needle is in vein, blood will be pulled into syringe; if this happens, place alcohol sponge over site, remove needle, and prepare medication again for administration.)

FIGURE 62



F. Push in plunger slowly (Figure 63)

FIGURE 63

JOB SHEET #6

G. Withdraw needle quickly while holding skin at injection site with an alcohol sponge (Figure 64)

FIGURE 64

H. Gently apply pressure on area with an alcohol sponge unless contraindicated (Figure 65)

(NOTE: Do not massage area, especially if insulin, allergy medication, or heparin has been given.)

FIGURE 65

JOB SHEET #6

I. Dispose of equipment appropriately

J. Document procedure

V. Procedure for giving an intramuscular injection

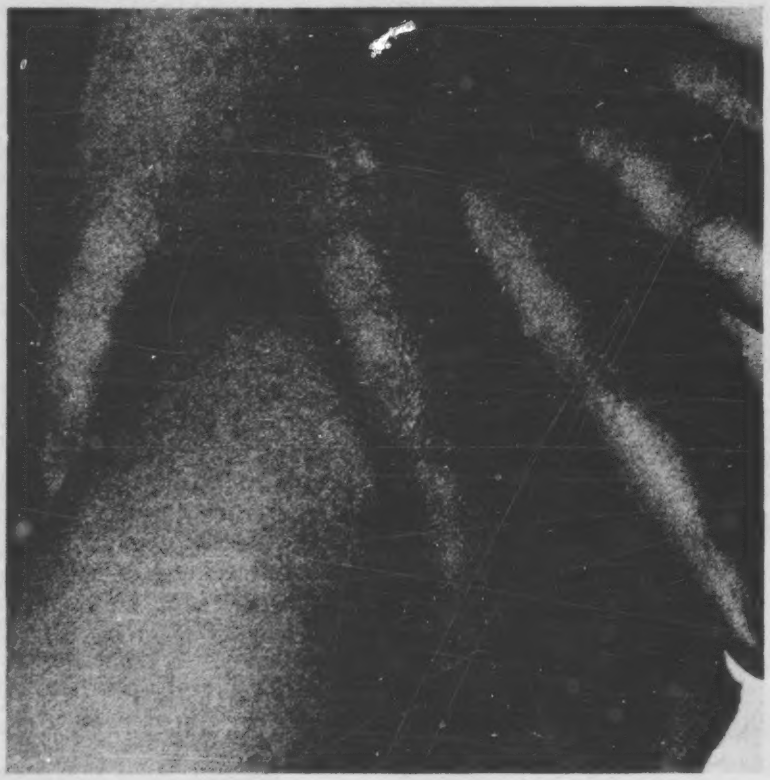
(NOTE: The usual sites for intramuscular injections are the deltoid, vastus lateralis, and gluteus medius muscles and ventrogluteal site.)

A. Check to make sure correct dosage of medication has been drawn up

B. Cleanse injection site

C. Stretch skin taut (Figure 66)

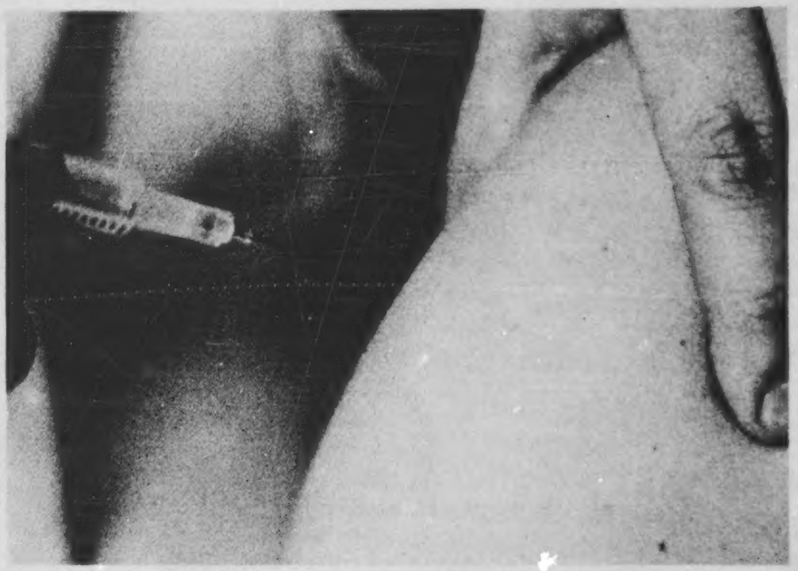
FIGURE 66



JOB SHEET #6

D. Quickly insert needle at a 60° to 90° angle to skin (Figure 67)

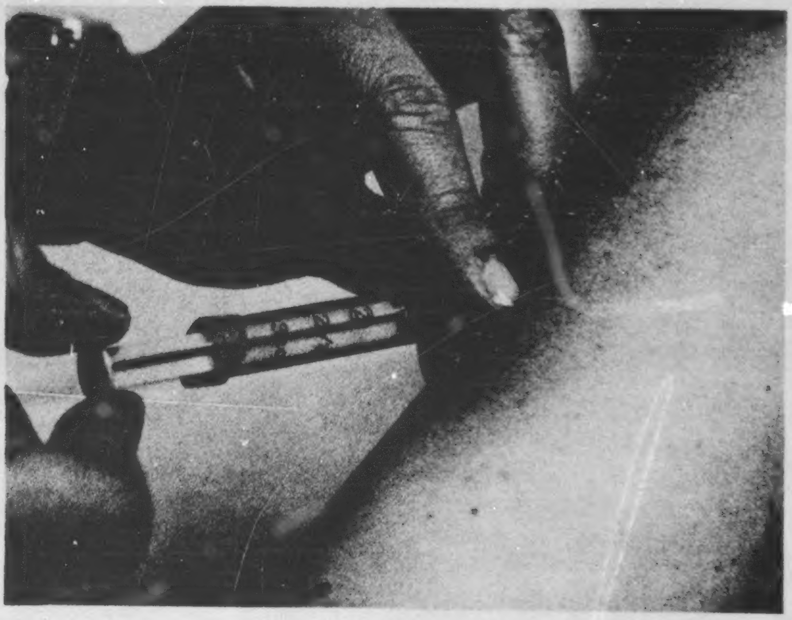
FIGURE 67



E. Release skin and pull back (aspirate) on plunger to be sure tip of needle is not in a vein (Figure 68)

(CAUTION: If needle is in vein, blood will be pulled into syringe; if this happens, place alcohol sponge over site, remove needle, and prepare medication again for administration.)

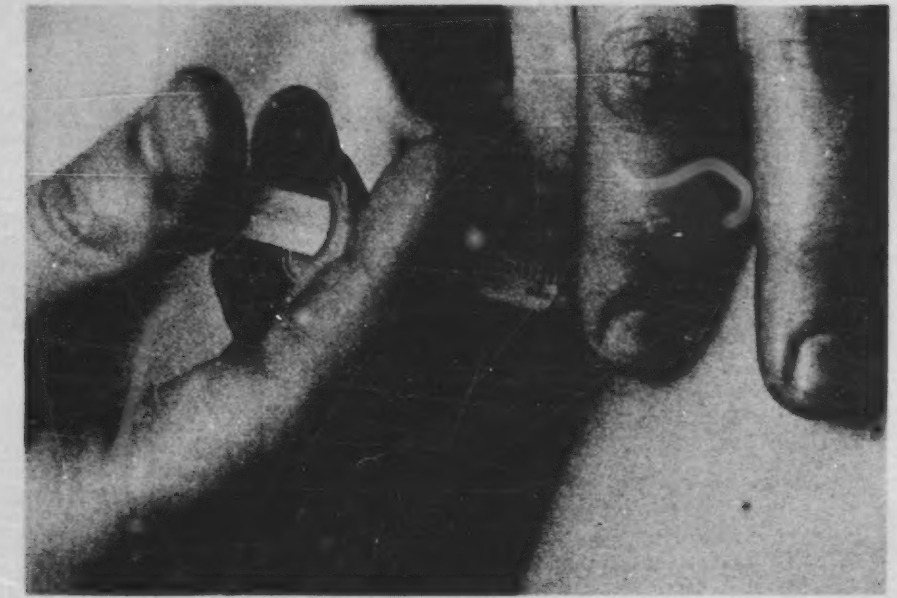
FIGURE 68



JOB SHEET #6

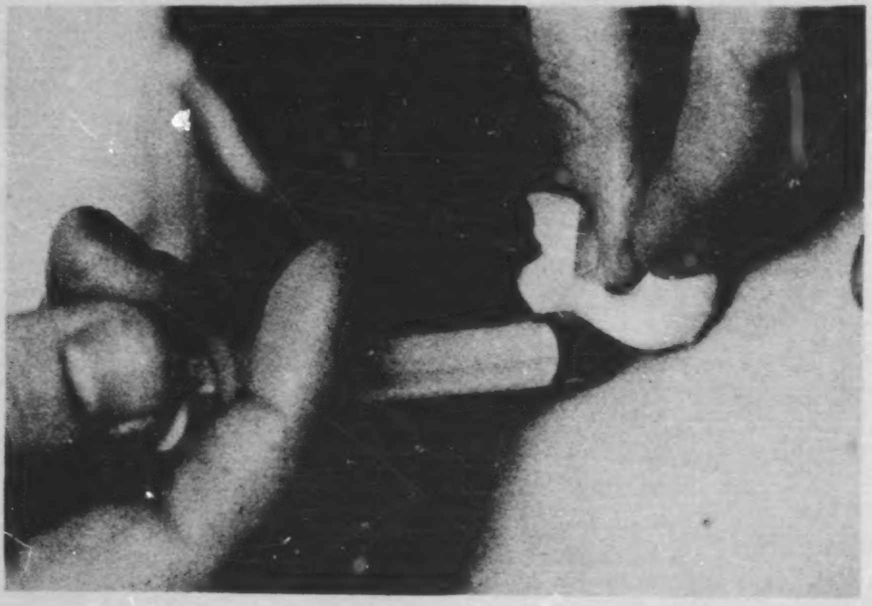
F. Gently push in plunger of syringe (Figure 69)

FIGURE 69



G. Withdraw needle quickly while holding skin at injection site with an alcohol sponge (Figure 70)

FIGURE 70

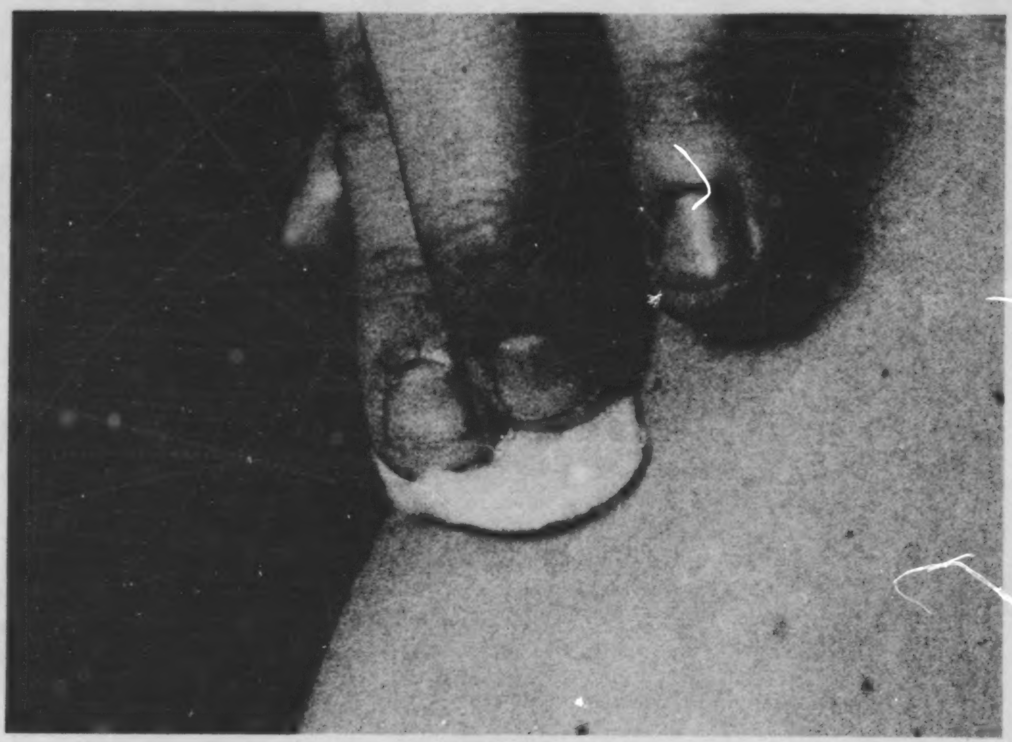


JOB SHEET #6

H. Apply pressure gently with alcohol sponge (Figure 71)

(NOTE: *Do not* massage depository medications.)

FIGURE 71



VI. Care of equipment

A. Discard disposable equipment in prescribed manner

B. Return all equipment to proper place

C. Wash hands

VII. Charting medication

A. Chart promptly

B. Chart name of medication, amount given, exact time given, method and site of administration

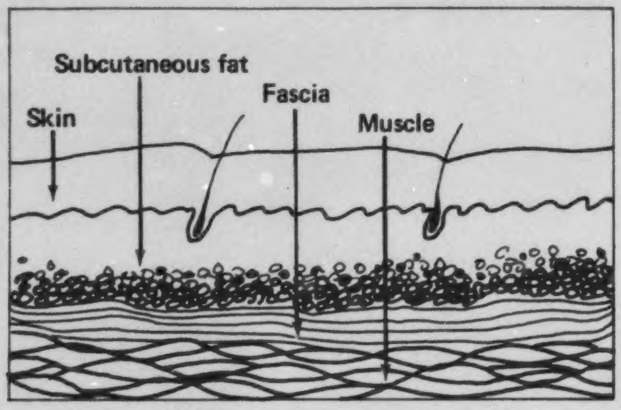
C. Note any unusual symptoms before, during, and after administration

JOB SHEET #6

VIII. Z-track technique for injections

(NOTE: This method avoids leakage of medication from deeper tissues into subcutaneous tissues; see Figure 72. This technique is used for irritating medications, repository medications, and for giving injections to obese patients.)

FIGURE 72



A. Prepare medication as for other injections, using a needle 1 1/2" long or longer

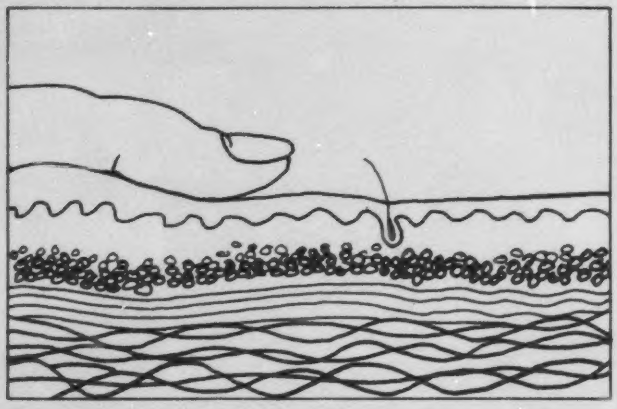
B. When preparing irritating substances such as iron, change needle to 1 1/2" or longer after withdrawing medication from vial

C. Position patient

D. Cleanse injection site with alcohol sponge

E. Pull skin and underlying tissue to one side with one hand; hold until injection is given (Figure 73)

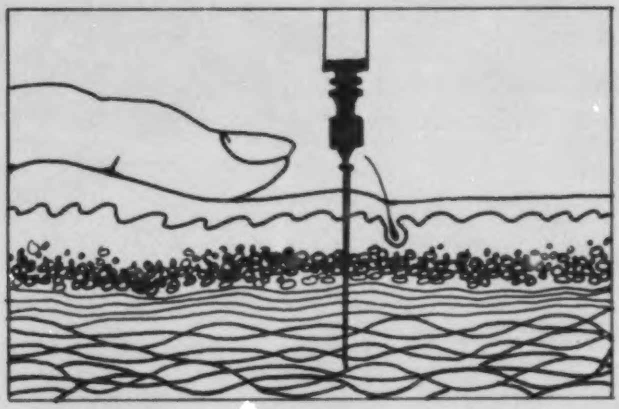
FIGURE 73



JOB SHEET #6

F. Insert needle quickly at 90° angle to skin (Figure 74)

FIGURE 74



G. Pull back on plunger (aspirate) to determine whether needle is in vein

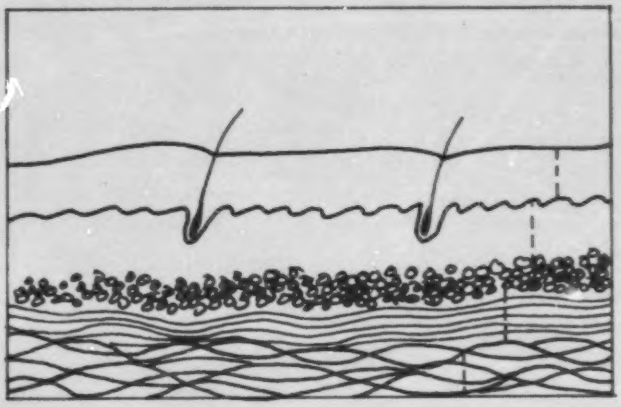
(CAUTION: If needle is in vein, blood will be pulled into syringe; if this happens, place alcohol sponge over site, remove needle, and prepare medication again for administration.)

H. Inject medication slowly; wait ten seconds before withdrawing needle

I. Withdraw needle

J. Release tissue being held with hand, allowing tissue to slide back into place, sealing in fluid (Figure 75)

FIGURE 75



K. Apply pressure to site gently but firmly unless contraindicated

JOB SHEET #6

(NOTE: Use the following guidelines when administering injections to a child.)

GUIDELINES FOR ADMINISTERING AN INJECTION TO A CHILD

Nursing Action	Rationale
1. Find out how the child copes with painful procedures.	This promotes individualization of care.
2. Use an approach based on the child's development level. a. Birth to 12 months Spend time with the infant prior to giving an injection.	This supports the development of a sense of trust.
For the older infant, state what you are going to do and proceed with the injection.	This age child cannot understand explanations but should not be injected without warning.
Provide something to look at or a toy to hold during the injection.	The infant is often distractible.
Provide physical comfort after the injection.	Physical comforting is more effective than verbal.
b. 1 to 3 years State what you are going to do and proceed with injection. Use simple words and short phrases. For example, say, "This will take only a minute and then you can play." Provide something for the child to look at, hold, or play with during the injection.	At this age the child obeys simple commands and develops a sense of time beginning at about 18 months of age. The toddler often can be distracted.
Give a simple, honest reason for the injection.	Fantasies are prominent at this age.
Use a firm, consistent approach, reward the toddler's positive behaviors, and ignore negative ones. Let the child take some part in the procedure, for example, holding the Band-Aid.	Rituals are important to toddlers, and they take pride in their accomplishments.
Provide a Band-Aid for covering the injection site.	The toddler has an incomplete sense of body boundaries and fears body contents may leak out.

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JOB SHEET # 6

Nursing Action	Rationale
c. 3 to 6 years	
Tell the child what will be felt and what he or she can do to help; for example, lie still.	This age child remains egocentric and is a concrete thinker but also can understand simple explanations and follow directions.
Let the child see and handle equipment before the nurse gives the injection.	Seeing and handling the equipment will help the child learn, and it promotes coping.
Tell the child that injections are never used as punishment and give a simple honest explanation.	The preschooler is developing a conscience and may view an injection as punishment for his or her actions, but can understand a simple explanation.
Allow youngster a choice when possible. For example, ask in which leg he or she wants the injection. Foster the development of coping mechanisms.	This age child seeks to master situations and takes pride in accomplishments.
Let the child play at giving injections, including handling a needle under supervision.	Therapeutic play is an effective means of dealing with fantasies and fears, especially those associated with painful and/or intrusive procedures.
d. 6 to 12 years	
Give a simple explanation of why the specific injection is needed.	This age child has the ability to think in a logical manner and comprehend relationships.
Let the child help select the injection site, if possible, and praise the child for cooperation.	Taking part in procedure supports the child's developmental need to master situations. This age group thrives on praise.
Provide time to sit and talk with the child.	For children of this age, talking about their fears replaces play as a method of dealing with anxiety.
e. 12 to 16 years	
Provide as much information as the adolescent requests about medication, but also tell how injections will feel.	The adolescent is capable of logical, abstract thinking but may also demonstrate egocentrism, especially when under stress.
Provide privacy and permit choice of injection site whenever possible.	The adolescent experiences concern over body image and likes to feel in control of a situation.

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JOB SHEET #6

Nursing Action	Rationale
3. Draw up the medication and pull back on the syringe to create a 0.2 ml/cc air bubble.	The air bubble will clear medication from the needle bore.
4. Change the needle after drawing up the medication.	A new needle will decrease the pain and prevent irritating medication from adhering to the needle.
5. Select a site.	(See Guidelines For Site Selection)
6. Position the child, using other assistants to restrain the child as needed.	Delaying the procedure will increase the anxiety of the child, the parent, and the nurse. Most children require some assistance in order to remain still during the procedure.
7. Avoid a battle of wills.	This is frightening to the child, he may be overwhelmed by a feeling that no one is in control.
8. Encourage the older child to relax the muscle.	Injecting into tense muscles causes increased pain and bleeding.
9. Allow the skin antiseptic to dry.	Wet antiseptic will adhere to the needle and increase pain in the subcutaneous tissues.
10. Allow the child to squeeze someone's hand, and yell "Ouch" when the injection is given.	This provides a means of coping.
11. Continue to inform the child about what you are doing and how he or she can help.	The child can cope better if well informed.
12. Use a dart action to insert the needle.	This action lessens puncture pain.
13. Aspirate and inject the solution slowly.	A slow rate allows the muscle to distend and the medication to spread into the tissues.
14. Continue to restrain the child while the needle is rapidly withdrawn.	The child's major concern is getting rid of the pain and trauma, and he or she may try to pull out the needle.
15. Massage the area, unless contraindicated.	Distribution and absorption is enhanced by massage.

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JOB SHEET #6

IX. Checklist for administering injections (adults and children)

	Performed Well	Needs Improvement
A. Intradermal injection		
1. Made sure correct amount of medication was drawn up	☐	☐
2. Cleansed the injection site	☐	☐
3. Held skin taut by grasping posterior surface of patient's arm with hand encircling the patient's arm	☐	☐
4. Inserted needle, bevel up, directly under the skin at an angle of 15 degrees	☐	☐
5. Injected prescribed amount of medication slowly and gently as possible	☐	☐
6. Withdrew the needle and applied gentle pressure to the site	☐	☐
7. Disposed of equipment; documented procedure	☐	☐

Comments: ______________________________

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JOB SHEET #6

	Performed Well	Needs Improvement
B. Subcutaneous or hypodermic injection		
1. Made sure that correct amount of medication had been drawn up	☐	☐
2. Cleansed the injection site with alcohol sponge; using a circular motion, started at the center and extended out to cleanse approximately a two-inch area	☐	☐
3. Pinched up the skin and quickly inserted the needle at a 45° to 60° angle to the skin	☐	☐
4. Released the skin and aspirated to be sure tip of needle was not in a vein	☐	☐
5. Pushed in plunger slowly	☐	☐
6. Withdrew needle quickly while holding skin at injection site with an alcohol sponge	☐	☐
7. Gently applied pressure on area with an alcohol sponge unless contraindicated	☐	☐
8. Disposed of equipment appropriately	☐	☐
9. Documented procedure	☐	☐

Comments: ____

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JOB SHEET #6

		Performed Well	Needs Improvement
C.	Intramuscular		
1.	Checked to make sure correct dosage of medication had been drawn up	☐	☐
2.	Cleansed injection site	☐	☐
3.	Stretched skin taut	☐	☐
4.	Quickly inserted needle at a 60° to 90° angle to the skin	☐	☐
5.	Released skin and aspirated to be sure the tip of needle was not in a vein	☐	☐
6.	Gently pushed in the plunger of the syringe	☐	☐
7.	Withdrew needle quickly while holding skin at injection site with an alcohol sponge	☐	☐
8.	Applied pressure gently with an alcohol sponge	☐	☐

Comments: ____

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JOB SHEET #6

	Performed Well	Needs Improvement
D. Z-track technique		
1. Prepared medication	☐	☐
2. Changed needles to 1 ½" or longer after withdrawing medication if irritating substance	☐	☐
3. Positioned patient	☐	☐
4. Cleansed injection site with alcohol sponge	☐	☐
5. Pulled skin and underlying tissue to one side with one hand; held until injection was given	☐	☐
6. Inserted needle quickly at 90° angle to skin	☐	☐
7. Aspirated to determine whether needle was in vein	☐	☐
8. Injected medication slowly; waited ten seconds before withdrawing needle	☐	☐
9. Released tissue being held with hand, allowing tissue to slide back into place, sealing in fluid	☐	☐
10. Applied pressure to site gently but firmly unless contraindicated	☐	☐

Comments: ____

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JOB SHEET #6

		Performed Well	Needs Improvement
E.	Care of equipment		
1.	Discarded equipment in prescribed manner and returned any other equipment to proper place	☐	☐
2.	Washed hands	☐	☐

Comments: ____

____

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____

		Performed Well	Needs Improvement
F.	Charting medication		
1.	Charted promptly	☐	☐
2.	Charted name of medication, amount given, exact time given, method and site of administration	☐	☐
3.	Noted any unusual symptoms before, during, and after administrations	☐	☐

Comments: ____

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ADMINISTRATION OF MEDICATIONS
UNIT IV

JOB SHEET #7--ADMINISTER SUBLINGUAL AND BUCCAL MEDICATIONS

I. Equipment

A. Medication orders and card

B. Medication

C. Medicine cup

II. Procedure

A. Check medication order to determine site

B. Wash hands

C. Prepare medication

(NOTE: Medication in individually sealed packages should be opened at the patient's bedside.)

D. Identify patient and explain procedure

E. Assist patient as necessary to place medicine in prescribed site

F. Instruct patient to retain medication in prescribed site until it is absorbed

G. Replace equipment used

H. Wash hands

I. Record and report medication

J. Observe patient for reaction

K. Record observation

JOB SHEET #7

III. Checklist for administering sublingual and buccal medications

		Performed Well	Needs Improvement
A.	Checked medication order to determine site	☐	☐
B.	Washed hands and prepared medication	☐	☐
C.	Identified patient and explained procedure	☐	☐
D.	Assisted patient as necessary to place medicine in prescribed site	☐	☐
E.	Instructed patient to retain medication in the prescribed site until it was absorbed	☐	☐
F.	Replaced equipment used	☐	☐
G.	Washed hands	☐	☐
H.	Recorded medication administration	☐	☐
I.	Observed patient for reaction	☐	☐
J.	Recorded observations	☐	☐

Comments: ____

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ADMINISTRATION OF MEDICATIONS
UNIT IV

JOB SHEET #8--APPLY TOPICAL MEDICATION

I. Equipment

- A. Medication order and card
- B. Medication
- C. Dressings if ordered or required
- D. Clean or sterile gloves if needed
- E. Tongue depressors, cotton swabs, or cotton balls
- F. Tray for equipment if needed

II. Procedure

(NOTE: Ointments are usually rubbed onto the skin, cream rubbed into the skin; lotions may be swabbed on with cotton swabs, applicators or cotton balls, or applied with the hands; liniments may be applied with as little rubbing as possible or may be massaged well to increase effect. Poultices and plasters should be used according to manufacturer's instructions.)

A. Check medication order to determine

1. If dressings are needed
2. If sterile gloves are needed
3. Method of application

   EXAMPLES: By hand or with swab or cotton balls

4. If medication is to be applied sparingly or generously

B. Wash hands

C. Assemble equipment

D. Identify patient and explain procedure

E. Provide privacy

F. Expose area to be treated

(NOTE: Application of medicine should be made after bath unless otherwise specified.)

G. Apply medication as directed

H. Apply dressing if needed

JOB SHEET #8

I. Provide for patient's comfort

J. Wash hands

K. Replace equipment used

L. Record treatment

M. Observe for reaction

N. Record observations

JOB SHEET #8

III. Checklist for applying topical medications

		Performed Well	Needs Improvement
A.	Checked medication order; determined if dressings or gloves were needed and the method of application	☐	☐
B.	Washed hands; assembled equipment	☐	☐
C.	Identified patient and explained procedure	☐	☐
D.	Provided privacy	☐	☐
E.	Exposed area to be treated	☐	☐
F.	Applied medication as directed	☐	☐
G.	Applied dressings if needed	☐	☐
H.	Provided for patient's comfort	☐	☐
I.	Washed hands	☐	☐
J.	Replaced equipment used	☐	☐
K.	Recorded treatment	☐	☐
L.	Observed for reactions	☐	☐
M.	Recorded observations	☐	☐

Comments: ____

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ADMINISTRATION OF MEDICATIONS
UNIT IV

JOB SHEET #9--APPLY MEDICATED WET DRESSINGS

I. Equipment

- A. Medication order and card
- B. Medicated solution
- C. Basin
- D. Dressings
- E. Bed protector if needed
- F. Clean or sterile gloves if needed
- G. Tray for equipment

II. Procedure

- A. Check medication order
- B. Wash hands
- C. Prepare solution according to directions
- D. Assemble equipment
- E. Identify patient and explain procedure
- F. Provide privacy
- G. Place bed protectors as needed
- H. Position patient as needed for application of compresses
- I. Saturate dressing and press out excess moisture

  (NOTE: Dressing should be uniformly moistened but not wet enough to drip.)
- J. Place moistened dressings on extremity
- K. Wrap the part loosely
- L. Provide additional cover as needed to keep patient warm
- M. Check dressings often during treatment; remove and reapply as often as needed to maintain moisture
- N. Each time dressings are removed, observe affected area for maceration of tissues or symptoms of irritation

JOB SHEET #9

O. Leave wet dressings uncovered unless otherwise ordered

P. Remove dressings at end of treatment

Q. Pat skin dry, using as little friction as possible

R. Apply dry dressing as required

S. Provide for patient's comfort

T. Return equipment to proper place

U. Wash hands

V. Record treatment

JOB SHEET #9

III. Checklist for applying medicated wet dressings

		Performed Well	Needs Improvement
A.	Checked medication order	☐	☐
B.	Washed hands; prepared solution according to directions	☐	☐
C.	Assembled equipment	☐	☐
D.	Identified patient and explained procedure	☐	☐
E.	Provided privacy; placed bed protectors as needed	☐	☐
F.	Positioned patient as needed for application of compresses	☐	☐
G.	Saturated dressing and pressed out excess moisture	☐	☐
H.	Placed moistened dressings on extremity and wrapped loosely	☐	☐
I.	Provided additional cover as needed to keep patient warm	☐	☐
J.	Checked dressings often during treatment; removed and reapplied as often as needed to maintain moisture	☐	☐
K.	Observed affected area for maceration of the tissues or symptoms of irritation	☐	☐

Comments: ____

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JOB SHEET #9

		Performed Well	Needs Improvement
L.	Left wet dressings uncovered unless otherwise ordered	☐	☐
M.	Removed dressings at end of treatment	☐	☐
N.	Patted skin dry, using as little friction as possible	☐	☐
O.	Applied dry dressing as required	☐	☐
P.	Provided for patient's comfort	☐	☐
Q.	Returned equipment to proper place	☐	☐
R.	Washed hands; recorded treatment	☐	☐

Comments: ______________________________

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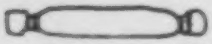
ADMINISTRATION OF MEDICATIONS
UNIT IV

JOB SHEET #10--ADMINISTER AROMATIC AMMONIA

I. Equipment

A. Inhalant of aromatic ammonia (Figure 76)

FIGURE 76



B. Gauze 4 x 4s

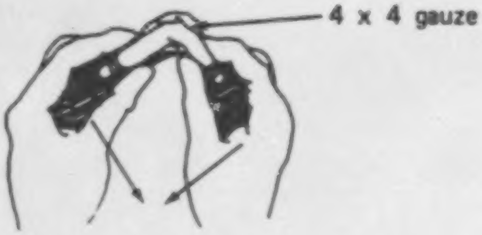
II. Procedure

(NOTE: Inhalants of aromatic ammonia are used as emergency treatment of patient who has fainted or is feeling faint.)

A. Assemble equipment

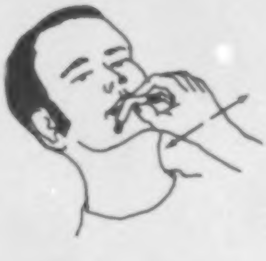
B. Crush inhalant in one or two 4 x 4s at patient's bedside (Figure 77)

FIGURE 77



C. Pass saturated gauze slowly back and forth near patient's nose as necessary (Figure 78)

FIGURE 78



D. Discard crushed inhalant after use

E. Report and record syncope, treatment, and response to treatment

JOB SHEET #10

III. Checklist for administering aromatic ammonia

		Performed Well	Needs Improvement
A.	Assembled equipment	☐	☐
B.	Crushed inhalant in one or two 4 × 4s at patient's bedside	☐	☐
C.	Passed saturated gauze slowly back and forth near patient's nose as necessary	☐	☐
D.	Discarded crushed inhalant after use	☐	☐
E.	Reported and recorded syncope, treatment, and response to treatment	☐	☐

Comments:

ADMINISTRATION OF MEDICATIONS
UNIT IV

JOB SHEET #11--PREPARE INSULIN FOR INJECTION

I. Equipment

- A. Vial of insulin
- B. Insulin syringe with needle
- C. Cotton sponges with antiseptic solution
- D. Medication order from physician, either verbal or written on chart

II. Procedure

- A. Wash hands
- B. Assemble equipment
- C. Check to see that insulin is the correct strength to administer the prescribed dosage
- D. Select appropriate syringe
- E. Rotate vial of insulin to ensure even mixture of solution

  (NOTE: Insulin will appear cloudy except for regular type that is clear and can be used intravenously if needed.)
- F. Assemble syringe if necessary
- G. Check dosage with a nurse or physician
  1. Read order carefully or repeat dosage back to physician verbally
  2. Check syringe and vial to be certain you are using the correct strength of insulin and proper syringe
- H. Cleanse top of vial with cotton sponge
- I. Draw back plunger of syringe, drawing in a volume of air equal to the volume of insulin to be withdrawn from vial
- J. Push needle of syringe into rubber cap of vial
- K. Push air into vial
- L. Invert vial

JOB SHEET #11

M. Withdraw required amount of insulin from vial

N. Hold plunger tightly with the little finger and pull the needle from the bottle

O. Check dose again

   1. Check type of insulin and dose strength on insulin bottle

   2. Check order with dose in syringe

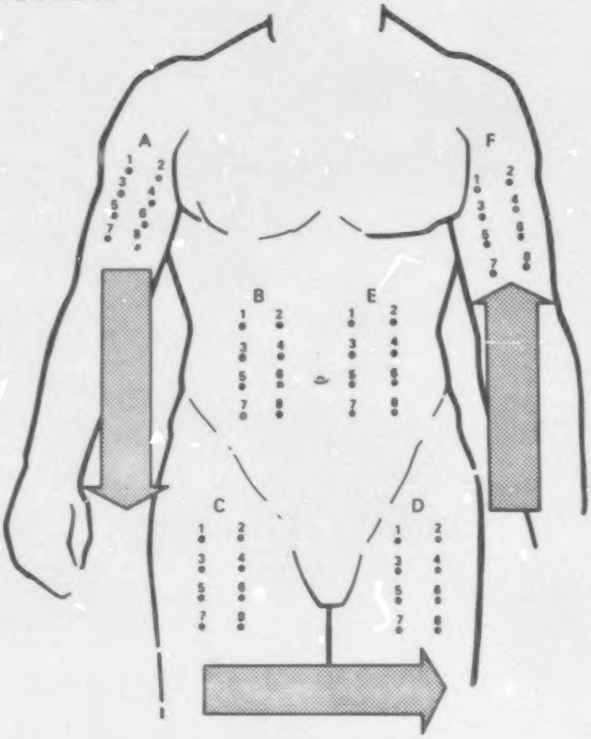
P. Have another licensed person check dose of insulin

   1. Bottle from which insulin was drawn

   2. Insulin syringe containing dose to be given

Q. Give injection subcutaneously (Figure 79)

FIGURE 79


A
1 2 3 4 5 6 7 8
F
1 2 3 4 5 6 7 8
B
1 2 3 4 5 6 7 8
E
1 2 3 4 5 6 7 8
C
1 2 3 4 5 6 7 8
D
1 2 3 4 5 6 7 8

R. Care for equipment as instructed when procedure is completed

JOB SHEET #11

III. Checklist for preparing insulin for injection

		Performed Well	Needs Improvement
A.	Washed hands; assembled equipment	☐	☐
B.	Checked to see that insulin is the correct strength to administer the prescribed dosage	☐	☐
C.	Selected appropriate syringe	☐	☐
D.	Rotated vial of insulin to ensure even mixture of solution	☐	☐
E.	Assembled syringe if necessary	☐	☐
F.	Checked the dosage with a nurse or physician	☐	☐
G.	Cleansed top of vial with cotton sponge	☐	☐
H.	Drew back plunger of syringe, drawing in a volume of air equal to the volume of insulin to be withdrawn from vial	☐	☐
I.	Pushed needle of syringe into rubber cap of vial	☐	☐
J.	Pushed air into vial	☐	☐
K.	Inverted vial	☐	☐
L.	Withdrew required amount of insulin from vial	☐	☐

Comments: ____

____

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JOB SHEET #11

		Performed Well	Needs Improvement
M.	Held plunger tightly with the little finger and pulled the needle from the bottle	☐	☐
N.	Checked dose again	☐	☐
O.	Had another licensed person check dose of insulin	☐	☐
P.	Gave injection subcutaneously	☐	☐
Q.	Cared for equipment as instructed	☐	☐

Comments: ____

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ADMINISTRATION OF MEDICATIONS
UNIT IV

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with administration of medications to their correct definitions. Write the correct numbers in the blanks.

_____a. System of documenting administration of patient's medication using one card or form

_____b. Hives; skin condition characterized by appearance of itching, elevated welts or wheals

_____c. Condition resulting from excessive loss of fluids from the body

_____d. Agent that contracts or shrinks tissues or mucous membranes

_____e. Pertaining to the cheek

_____f. Temporary suspension of consciousness; fainting

_____g. Agent that produces a superficial inflammation for relief of a deeper inflammation in adjacent tissue

_____h. Beneath the tongue

_____i. Premeasured dosage of medication prepared [illegible] pharmacy and sent to floor to be used for administration

_____j. To withdraw fluids and/or gases from a cavity

_____k. Suddenly formed elevation of skin surface

_____l. The administration of unit dose prepared medications, using a mobile cart with individual patient's medications administered according to patient profile

_____m. Plastic, glass, or metal apparatus designed to withdraw or inject fluids for diagnostic or therapeutic purposes

1. Patient profile
2. Unit dose
3. Urticaria
4. Wheal
5. Dehydration
6. Buccal
7. Syncope
8. Astringent
9. Medicine cart system
10. Aspirate
11. Counterirritant
12. Sublingual
13. Syringe

TEST

_____n. Compound which prevents or arrests growth of bacteria but does not necessarily kill bacteria

_____o. Loss of sensitivity

_____p. Aromatic solution of ammonia and ammonium carbonate with a pungent odor

_____q. The administration of unit dose prepared medications, using traditional medication card and Kardex from a central nurses' station

_____r. Concave surface seen when liquids are poured into a measuring cup; caused by surface tension that pulls up portion of liquid touching glass

14. Desensitization
15. Aromatic ammonia
16. Functional system
17. Antiseptic
18. Meniscus

2. State facts about medicine orders.

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

g. ____

h. ____

3. Select from the following list items that a prescription must include. Write an "X" in the blank before each correct answer.

_____a. Patient's name, address, and date

_____b. Directions to the patient

_____c. Pharmacist's name

_____d. Names and quantities of ingredients

_____e. Signature, address, and when needed, the registry number of physician

_____f. Name of pharmaceutical company

TEST

4. Describe information needed on doctor's order sheet for medications.

   a. Patient's name, room number, name of physician

      1) ____________________

      2) ____________________

   b. Medication orders

      1) ____________________

      2) ____________________

      3) ____________________

5. List causes of common errors made in medication orders.

   a. ____________________

   b. ____________________

   c. ____________________

   d. ____________________

   e. ____________________

6. Complete a medicine card using the following information.

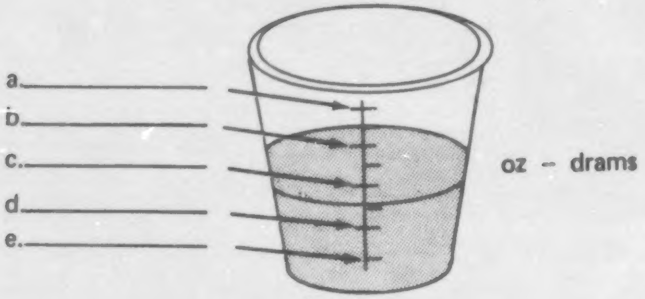
Patient's full name	Jeff D. Selman
Room number	402
Physician's name	Dr. Stewart
Drug order	Doxycycline 100 mg PO
	Give 1 capsule bid

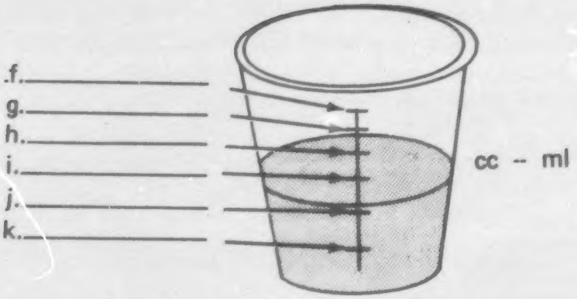
Today's date: 8-6-83
Stop: 8-12-83

NAME		
ROOM	START	STOP
DRUG		
DOSE		
TIME		

TEST

7. Label graduations or measurements usually found on a medicine glass. Answers for a through e should be in ounces/drams, f through k in cc/ml.


a.
b.
c.
d.
e.
oz – drams


f.
g.
h.
i.
j.
k.
cc – ml

8. State the "rights" of administering medications.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

TEST

9. Select from the following list principles to remember when preparing medications for administration. Write an "X" in the blank before each correct answer.

_____a. Use special measuring devices as needed

_____b. Wipe neck of bottle, if necessary, after pouring a liquid medication

_____c. Dilute most liquid medications with appropriate solutions

_____d. Shake liquid medicines, if needed, before measuring

_____e. Concentrate on the task at hand--preparing medications

_____f. Do not dilute cough syrup

_____g. Pour back in original container any medication that you do not use

_____h. Place thumbnail on medicine glass to mark correct dose

_____i. Avoid handling medications with your fingers; pour tablets or capsules into lid of medicine bottle so that extras can be returned to bottle

_____j. Pour from side opposite label to avoid soiling it

_____k. Hold medicine glass straight and at eye level when measuring liquids

10. State safety measures in giving medications.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

f. ____________________

g. ____________________

h. ____________________

i. ____________________

j. ____________________

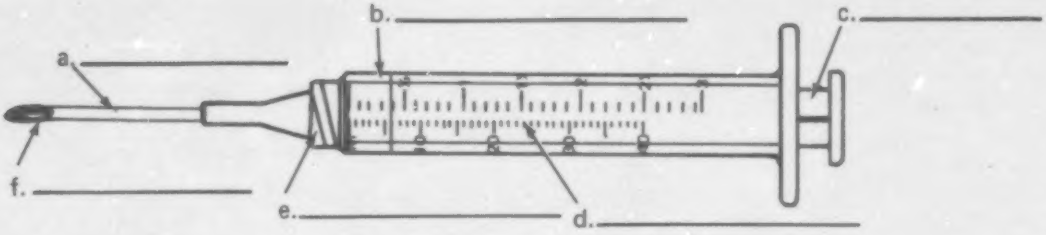
k. ____________________

l. ____________________

m. ____________________

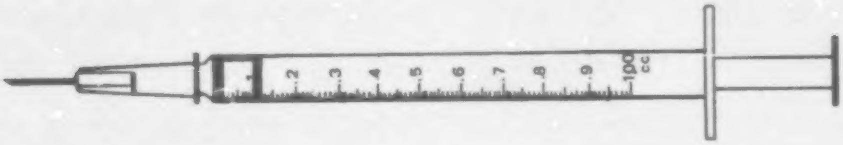
TEST

11. Label parts of the syringe and needle. Write the correct names in the blanks.

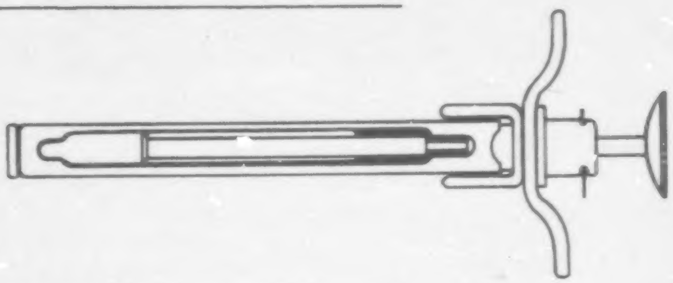


12. Identify types of syringes used for injections. Write the correct names in the blanks. An answer may be used more than once.

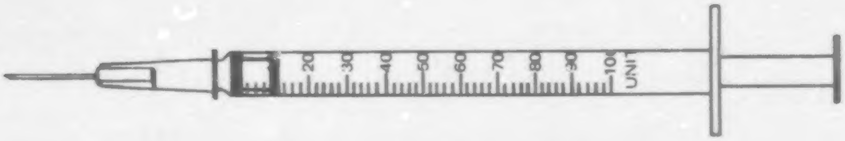
Standard	Insulin
Cartridge	Tuberculin


.1
.2
.3
.4
.5
.6
.7
.8
.9
1.00
cc

a. ______________________

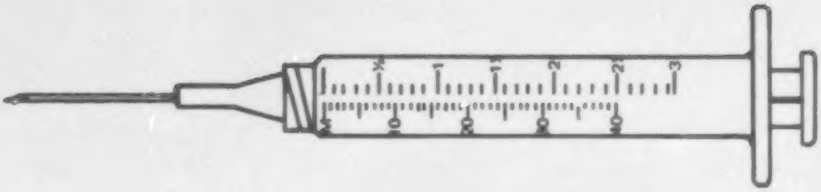


b. ______________________


10
20
30
40
50
60
70
80
90
100
UNITS

c. ______________________

TEST



d. ______________________

13. Describe size and length and needles used for injections.

____

____

____

____

____

____

____

14. State factors that influence selection of syringes and needles.

a. ______________________

b. ______________________

c. ______________________

d. ______________________

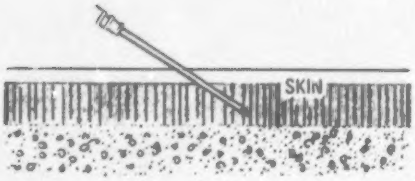
TEST

15. Identify common methods of administration by injection. Write the correct names in the blanks.

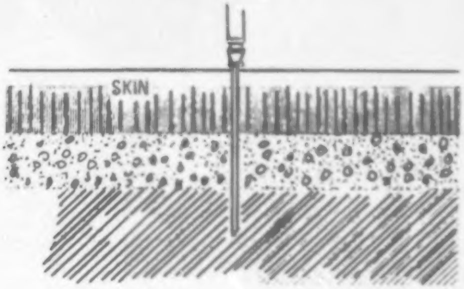
Subcutaneous or hypodermic

Intramuscular

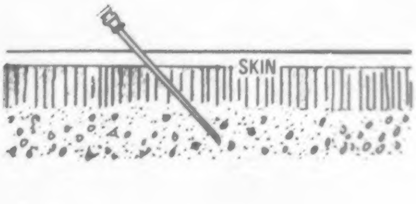
Intradermal



a. ______________________________



b. ______________________________

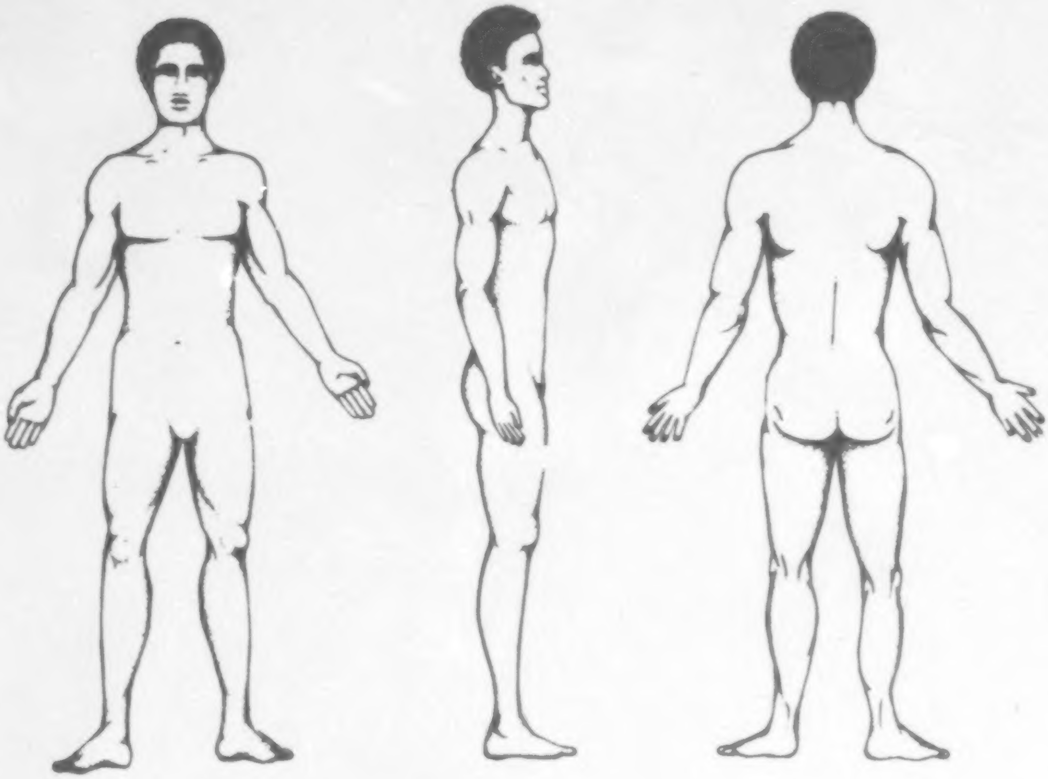


c. ______________________________

TEST

16. Label sites on figures below for each method of administration by injection.

ID = Intradermal S = Subcutaneous IM = Intramuscular



17. Distinguish among factors which influence the selection of each administration by injection method. Write an "ID" in the blanks before intradermal, an "S" before subcutaneous, and an "IM" before intramuscular. Blanks may have more than one correct answer.

_____a. Medication is to be used for diagnostic purposes

_____b. Medication is unsuitable for subcutaneous, intradermal, or intravenous administration

_____c. More rapid effect than by oral administration is desired

_____d. Oral administration is inappropriate

_____e. Accuracy is necessary for small dosages

TEST

18. List purposes of local applications.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

19. Describe types, methods, and purposes of local applications.

Type	Method of Application	Some Purposes
Ointments	Directly on skin or spread on dressings	a. ______________
b. ______________	Swabbed on skin	Antisepsis; astringent; relief of itching, dryness, or irritation
Liniments	Rubbed on skin vigorously	c. ______________
Medicated or wet dressings	d. ______________	Antisepsis, astringent, local treatment of skin disorders
Poultices or plasters	Thin layer of drug mixed with resin, wax, or fatty substance and spread on cloth; prepared cloth applied to skin	e. ______________
f. ______________	Flow of solution through an infected wound or organ	Treat infection or inflammation, cleansing of affected part
Instillations in eyes, ear, or nose	g. ______________	For infection and/or inflammation

TEST

20. List common purposes of rectal administration.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

f. ____________________

g. ____________________

h. ____________________

21. State physiological changes in the aging patient that should be considered when administering medications.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

22. Select from the following list ways to give medications effectively to the elderly. Write an "X" in the blank before each correct answer.

_____a. Make sure patient has swallowed medication

_____b. Do not leave medications at bedside unless ordered

_____c. Crush capsules before giving

_____d. Use liquids or semisolid foods as vehicles for medications

_____e. Position patient to facilitate swallowing

_____f. Do not hurry the patient

_____g. Use a feeding tube to give medications

_____h. Explain to patient exactly what you are going to do or what you wish patient to do

_____i. Prioritize the administration of medication

_____j. Leave liquid medications at bedside so that patients can sip them at their leisure

TEST

23. State ways to give medications effectively to children.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

24. Select from the following list facts about administration of insulin. Write an "X" in the blank before each correct answer.

_____a. Dosages may be given according to a sliding scale indicated by physician according to urine or blood tests taken at intervals during the day

_____b. Insulin vials should be gently rotated to mix drug

_____c. Insulin dosages are always individualized

_____d. Most insulin types may be mixed

_____e. Three types of insulin may be given intravenously

_____f. Dosage of insulin is adjusted according to amount of glucose in urine and blood and its time of appearance in relation to insulin injections and meals

_____g. Exercise should be discontinued in first treatment phase of diabetes

_____h. Site of insulin injection should be rotated so that one site is not used more than once per month

_____i. Insulin, diet, exercise, and condition must be considered to avoid hypoglycemia and/or hyperglycemia

_____j. Use only syringes with markings that correspond to correct strength of insulin to be used

_____k. All bottles of insulin are marked with an expiration date and should not be used after that date

_____l. Oral hypoglycemics can be used in place of insulin

TEST

(NOTE: Test questions 25 and 26 list the assignment and job sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

25. Transcribe medication orders from doctor's orders sheets to medication cards.

26. Demonstrate the ability to

    a. Read a medicine glass.

    b. Use a syringe.

    c. Prepare an injection from a vial and an ampule.

    d. Use a cartridge syringe.

    e. Locate intramuscular injection sites (adults and children).

    f. Administer injections (adults and children).

    g. Administer sublingual and buccal medications.

    h. Apply topical medication.

    i. Apply medicated wet dressings.

    j. Administer aromatic ammonia.

    k. Prepare insulin for injection.

ADMINISTRATION OF MEDICATIONS
UNIT IV

ANSWERS TO TEST

1.

a.	1	g.	11	m.	13
b.	3	h.	12	n.	17
c.	5	i.	2	o.	14
d.	8	j.	10	p.	15
e.	6	k.	4	q.	16
f.	7	l.	9	r.	18

2. a. Name of medicine, amount to be given, route of administration, and time and frequency of dosage must be stated

   b. All medication orders must be originated by licensed physician or dentist and signed within twenty-four hours

   c. If necessary, verbal orders may be taken by phone or in person by a licensed person; orders must be signed by physician within twenty-four hours

   d. If there is any doubt concerning a medication order, the nurse should consult charge nurse or physician

   e. When an order is discontinued, this information should be documented as soon as possible according to hospital procedure

   f. No nurse can change or alter a physician's order in any way

   g. Follow automatic stop orders as indicated by hospital policy

   h. *Never* disregard an order

3. a, b, d, e

4. Description should include the following

   a. Patient's name, room number, name of physician

      1) An addressograph stamp may be used to print this information

      2) Patient's full name should be written on sheet

ANSWERS TO TEST

b. Medication orders

  1) Date, time, name of drug (generic or trade), dosage, route of administration, and times of administration

  2) Physician's signature

  3) Information should be clearly written; if it is not understandable, then it should be checked with physician

5. a. Abbreviations written incorrectly

  b. Names of patients that look or sound alike

  c. Drug names that sound alike or are spelled similarly

  d. Misplaced decimal points

  e. Poor handwriting scribbled in haste

6. Name: Selman, Jeff D. Start: 8-6-83 Stop: 8-12-83
Room: 402
Drug: Doxycyline
Dose: 100 mg PO
Time: Bid 8-4 (or times indicated by hospital as twice a day)

7. a. 1fl oz -- 8 drams

  b. 3/4 fl oz -- 6 drams

  c. 1/2 fl oz -- 4 drams

  d. 1/4 fl oz -- 2 drams

  e. 1/8 fl oz -- 1 dram

  f. 30 cc -- 30 ml

  g. 25 cc -- 25 ml

  h. 20 cc -- 20 ml

  i. 15 cc -- 15 ml

  j. 10 cc -- 10 ml

  k. 5 cc -- 5 ml

8. a. Right patient

  b. Right medication

  c. Right amount

  d. Right route of administration

  e. Right time and date

  f. Right chart

9. a, b, d, e, f, h, i, j, k

ANSWERS TO TEST

10. a. Follow policies and directives of institution

    b. Give only medications which you prepare

    c. Always read medication label three times: once before taking container from shelf; once more before pouring (check label with medication card); and last, when returning container to shelf

    d. Never use an unlabeled bottle

    e. Give only medication for which there is a written order; document accurately

    f. Know why the medicine is given, its maximum dose, the expected reactions and/or adverse symptoms, and why the medication is being given to that particular patient

    g. *Do not* return medicine to a container after pouring it

    h. *Do not* combine two partially filled containers of like medication

    i. Keep medications and medicine cards together until medication is given

    j. Make positive patient identification before giving any medication

    k. Do not leave medication at patient's bedside unless so ordered; stay with patient until medicine is taken

    l. Keep medication tray or cart in sight at all times while administering medications

    m. Make accurate and exact measurements of medications

11. a. Cannula

    b. Barrel

    c. Plunger

    d. Scale or calibrations

    e. Tip or hub

    f. Lumen

12. a. Tuberculin

    b. Cartridge

    c. Insulin

    d. Standard

ANSWERS TO TEST

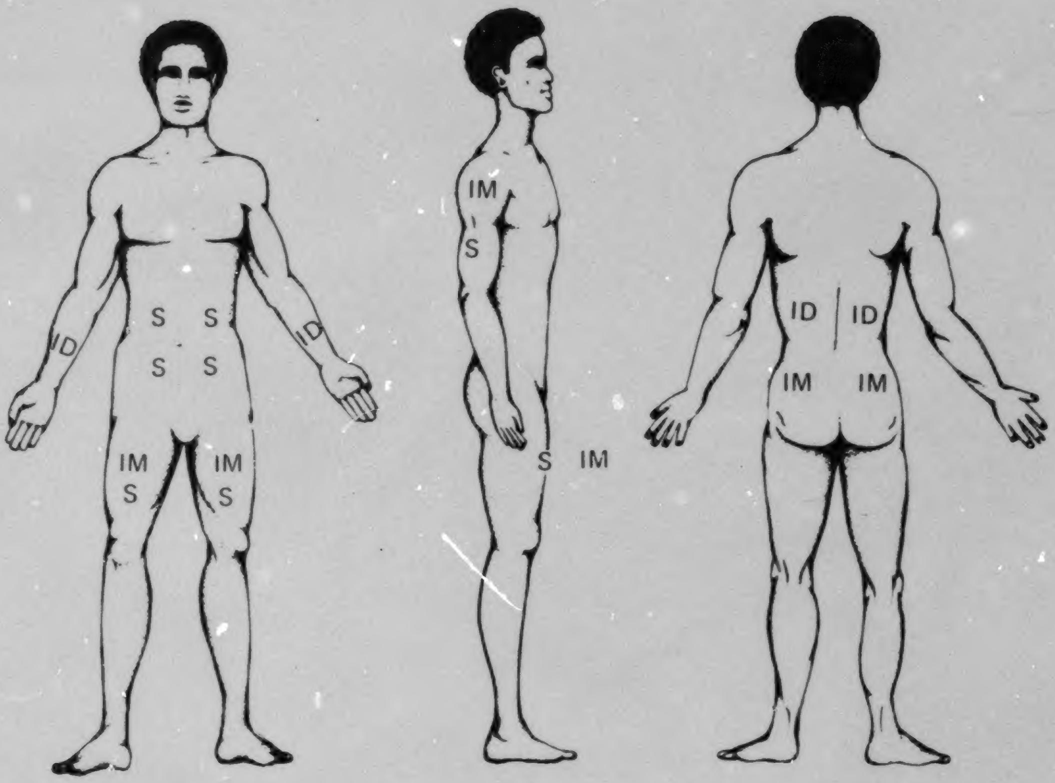
13. Description should include the following
    - a. Gauge ranges from 16 to 27
    - b. Smaller lumen needles have larger gauge numbers than larger lumen needles
    - c. Length ranges from 1/2" to 2"
    - d. Long needles (1" to 1 1/2") with large gauges are used for intramuscular injections and intravenous and hypodermoclysis infusions
    - e. Short needles (1/2" to 1") with small gauges are used to give intradermal and/or hypodermic subcutaneous injections

14. a. Type of medication
    - b. Route of administration
    - c. Age, size, and physical condition of patient
    - d. Amount of medication

15. a. Intradermal
    - b. Intramuscular
    - c. Subcutaneous or hypodermic

ANSWERS TO TEST

16.


IM
S
ID
S S
ID
S S
IM
S
IM
S
S IM
ID ID
IM IM

17. a. ID
    b. IM
    c. ID, S, IM
    d. ID, S, IM
    e. S

18. a. Desensitization
    b. Astringent
    c. Antiseptic
    d. Counterirritant
    e. Systemic effect

ANSWERS TO TEST

19. a. Relieve irritation, treat of local and/or systemic skin diseases

    b. Lotions

    c. Counterirritant, relief of soreness of muscles and joints

    d. Material saturated with medicated solution applied to affected area

    e. Counterirritant, relief of pain and congestion in deeper tissues

    f. Irrigations or douches

    g. By dropper, spray, catheter, syringe

20. a. To relieve nausea

    b. As a cathartic

    c. To relieve inflammation

    d. As a sedative

    e. As an analgesic

    f. To soften feces

    g. As an emollient

    h. As an antipyretic

21. a. Decrease or change in digestive enzymes that slows rate of absorption and transferral from GI tract to bloodstream

    b. Decrease in ability of kidneys to excrete drugs that may cause cumulative effect in body

    c. Slowing of metabolism that means drug dosages may need to be lowered

    d. Changes in circulatory system that may alter or slow specific drugs in reaching target areas and in being transferred systemically

22. a, b, d, e, f, h, i

23. a. Ask parents for information concerning child's past experiences with medications

    b. Give honest, simple answers and explanations to children and parents

    c. Give oral medications slowly and use appropriate containers such as medicine cups, eyedroppers, needleless syringes for administration

ANSWERS TO TEST

- d. Explain the reasons for using restraints
- e. Praise child who has been cooperative
- f. Teach parents and child when possible about the prescribed drug therapy

24. a, b, c, f, h, i, j, k

25. Evaluated to the satisfaction of the instructor

26. Performance skills evaluated to the satisfaction of the instructor

INTRAVENOUS THERAPY
UNIT V

UNIT OBJECTIVE

After completing this unit, the student should be able to assist with the maintaining and monitoring of intravenous therapy. This knowledge will be shown by completing the assignment sheet, job sheet, and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with intravenous therapy to their correct definitions.
2. List purposes of intravenous therapy.
3. Describe advantages and disadvantages of IV administration methods.
4. State precautions that should be observed in administering intravenous fluids.
5. Describe signs, symptoms, appropriate treatments, and preventive measures of possible problems of IV therapy.
6. State nursing responsibilities for monitoring IVs.
7. Calculate rate of flow of IVs, using a formula.
8. Describe method of checking flow rate of IVs.
9. List commonly administered blood products.
10. Select from a list signs or symptoms of reaction when blood or blood products are being administered.
11. Arrange in order steps to take if serious reaction occurs when administering blood or blood products.
12. Demonstrate the ability to care for a patient receiving intravenous therapy.

INTRAVENOUS THERAPY
UNIT V

SUGGESTED ACTIVITIES

I. Suggested activities

  A. Order materials planned to supplement unit--Filmstrips.

    1. *Nursing Care During Intravenous Therapy*

    2. *Management of Blood Transfusion*

    3. *Venipuncture and Starting an Intravenous Infusion*

    (NOTE: Filmstrips are available from Trainex Corporation, P. O. Box 116, Garden Grove, California 92642.)

  B. Make transparencies.

  C. Provide students with objective sheet.

  D. Provide students with information, assignment, and job sheets.

  E. Discuss unit and specific objectives.

  F. Discuss information and assignment sheets.

  G. Demonstrate and discuss procedures outlined in job sheet.

  (NOTE: The extent of your instruction will depend on your program and its objectives. If you do teach venipuncture, mixing and hanging additive solutions or medications, and dressing of IV sites, follow your hospital procedure guide, and involve the inservice department in this instruction if possible.)

  H. Develop appropriate learning activities for special needs students.

  I. Obtain from hospital pharmacy helpful information concerning types of IV fluids, medications, equipment, and procedures used within that facility.

  J. Request available pamphlets and/or equipment from major IV equipment companies to aid in teaching this unit.

  K. Give test.

  L. Reteach if necessary.

II. Instructional materials

  A. Objective sheet

  B. Suggested activities

SUGGESTED ACTIVITIES

C. Information sheet

D. Transparency masters

  1. TM #1--Intravenous Sites

  2. TM #2--Intravenous Infusion Equipment

E. Assignment Sheet #1--Calculate Rate of Flow of IVs

F. Answers to assignment sheet

G. Job Sheet #1--Care for a Patient Receiving Intravenous Therapy

H. Test

I. Answers to test

III. Unit references

A. Nichols, Aelene O., and Joy Day. *Pearls for Nursing Practice.* Philadelphia: J.B. Lippincott Co., 1979.

B. Robinson, Jean, ed. *Giving Medications*. Horsham, Pennsylvania: Nursing80 Photobook, Intermed Communications, Inc., 1980.

C. Squire, Jessie E., and Bruce D. Clayton. *Basic Pharmacology for Nurses,* 7th ed. St. Louis: The C. V. Mosby Company, 1981.

INTRAVENOUS THERAPY
UNIT V

INFORMATION SHEET

I. Terms and definitions

- A. Air embolus--Large amount of air in the heart or vascular system
- B. Cannula--Small tubular instrument for insertion into a blood vessel or body cavity
- C. Hematoma--Blood (usually clotted) in an organ, tissue, or space; caused by a break in a blood vessel
- D. Hyperalimentation--Method by which large quantities of fluids and nutrients are administered to a patient via a large blood vessel, usually the subclavian vein or vena cava

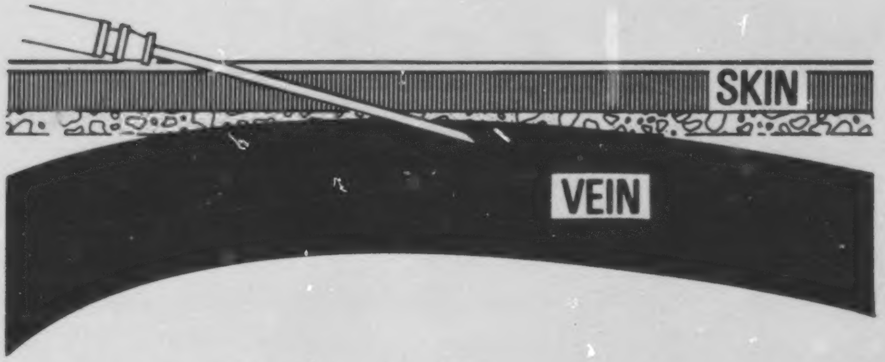
  (NOTE: This procedure requires sterile technique in performing and in maintaining. Because the catheter is so near the heart, all connections of tubing must be secure so that no air can enter.)
- E. Hypodermoclysis--Injection of fluids into subcutaneous tissues to supply body with liquids
- F. Induration--Hardened area of tissue
- G. Infiltration--Process of substance passing into and being deposited within a cell, tissue, or organ
- H. Infusion pump--Special device developed to provide constant but regulated flow of solutions given intravenously

INFORMATION SHEET

I. Intravenous--Within the vein (Figure 1; Transparency #1)

(NOTE: Common selected sites for IVs are the forearm, hand, or scalp.)

FIGURE 1



Needle Penetrates Skin and Vein at a 45-Degree Angle

J. Packed red cells--Erythrocytes from a unit of blood with most of the plasma removed

K. Patency--State of being open or unobstructed

L. Platelet concentrate (human)--Product prepared from single unit of whole blood or plasma and suspended in a specific volume of the original plasma

M. Serum albumin--Chief protein of blood serum

N. Thrombophlebitis--Inflammation of a vein developing with the formation of a thrombus (blood clot)

O. Whole blood--Complete blood product with all components intact

P. Whole plasma--Fluid portion of blood after cells have been removed

II. Purposes of intravenous therapy

A. Injection of drugs to provide immediate or controlled effects

B. Introduction of food, fluids, or drugs when oral administration is inadvisable

C. Replacement of fluids and electrolytes

INFORMATION SHEET

III. Advantages and disadvantages of IV administration methods

Method	Advantages	Disadvantages
Direct (bolus) (NOTE: Venipuncture must be done very carefully as rupture of the vein could cause concentrated drug to infuse quickly into tissues.)	Drugs are injected directly into vein; therefore, effects are seen sooner	Irritation of vein and shock from the effects of medication, if not given slowly, may be seen
Intermittent (NOTE: This type of intravenous therapy calls for an additive set of infusion systems. The drug is diluted and may be infused intermittently over a period of time or as a one-time dose with the primary solution.)	Less likely to cause irritation to vein, and since it is administered over a longer period of time, it is less likely to cause shock from effects of drug	Increased chance of contamination if port of entry for the additive set is used more than one time; without adequate knowledge of solutions and drugs, mixing medications may result in incompatibilities
Continuous drip (primary)	Less irritating to vein than bolus and requires less mixing and hanging than intermittent infusion	Flow rate must be monitored very carefully, and solutions used must be able to remain stable for the period of time

INFORMATION SHEET

IV. Precautions that should be observed in administering intravenous fluids (Transparency #2)

(NOTE: Remember that the same principles of safety apply to IV solutions and medications as to any drug that is being administered.)

A. Know the IV equipment and be familiar with each item and how it is used

B. Keep all equipment sterile; if in doubt, DO NOT USE

C. Check bottle or bag for any leaks or cracks; check labels for correct solution and/or any additive drugs; check for cloudiness or sediment

INFORMATION SHEET

V. Signs, symptoms, appropriate treatments, and preventive measures of possible problems of IV therapy

Problem	Signs, Symptoms	Treatment	Preventive Measures
Infiltration (NOTE: This problem may be caused from needle being displaced or from leakage of blood around the needle forming a hematoma.)	Coolness and swelling around site of IV Absence of blood flow in tubing when bottle or bag is lowered below IV site Flow rate slows or stops completely	Report problem and if qualified discontinue IV if ordered If swelling is small, apply ice; if larger area, apply warm, moist compresses	Use some type of splint to stabilize the needle or catheter to prevent it from becoming displaced
Systemic infection (NOTE: Infection can occur when poor aseptic technique has been used or when the equipment has been contaminated during manufacturing, storage, or use. Infection occurs more frequently when plastic catheters are used than when metal needles are used.)	Rise in temperature and pulse, changes in blood pressure, and chilling	Look for other sources first: Get culture on urine, sputum, or blood, depending on condition; IV should be discontinued and supplies sent to lab for bacterial analysis; IV should be restarted in another limb	ALWAYS keep equipment sterile; avoid any contamination; and if you suspect any part of the IV setup has been disconnected or contaminated, replace with sterile one
Thrombophlebitis (NOTE: Inflammation of a vein can be caused from needle movement either during venipuncture, or administration of the IV. Irritation of the vein can be caused from long-term therapy, from using veins too small to carry the load, or from using highly irritating solutions. Also when a sluggish flow occurs, a clot may form at the needle or catheter.)	Swelling of limb; vein becomes sore, hard, and warm to touch; possible appearance of red streaks about the IV site	Discontinue IV and apply warm, moist compresses **(CAUTION: Never try to irrigate the IV line as a clot might be forced into the bloodstream, causing an embolus.)** Notify physician	Always begin with a large enough vein to carry the load, dilute irritating additives, keep flow rate at prescribed rate, and stabilize needle with a splint

INFORMATION SHEET

VI. Nursing responsibilities for monitoring IVs (Job Sheet #1)

A. Be sure that patient receives specified amount of fluid prescribed at the rate ordered

B. Frequently check equipment, patient response, site of administration, and physician's orders for additional or new requests

C. Fill out appropriate forms to document intravenous therapy

EXAMPLES: IV solution and drug requests to pharmacy, I and O sheets, specific chart forms for IV therapy, and chart itself if descriptive notes are needed

D. Explain all procedures of treatment to patient and family and ask for their assistance in monitoring process

(NOTE: The cooperation of the patient and his or her family will be needed in the continuing IV process. Patients prepared for IVs will understand the need for the splinting process, the monitoring systems, and the importance of the continuous flow rate.)

E. Add additional fluids after infusion of previous bottle or bag, making sure that the correct solution is added and that tubing is free from air

F. Change IV tubing as indicated by your hospital policy, usually every twenty-four hours

VII. Formula used to calculate rate of flow of IVs (Assignment Sheet #1)

$$\frac{\text{Total Volume x gtt/ml/cc}}{\text{Minutes of Infusion Time}} = \text{gtt/Minute}$$

(NOTE: The rate of administration can be determined by the infusion sets manufactured by various companies. The number of drops per milliliter is stated on the package. Usual rates for Mead and Baxter, 10 gtt/ml/cc; Abbott, 15 gtt/ml/cc; Cutter, 20 gtt/ml/cc; most pediatric administration sets, 60 gtt/ml/cc. Be sure to check the package when setting up for IV therapy.)

EXAMPLE: Give 1000 ml of 5% dextrose in water (D 5/W) in eight hours using a Cutter administration set (20 gtt/ml/cc).

Volume--1000 ml
Gtt/ml/cc--20
Infusion time in minutes--480

$$\frac{1000 \times 20}{480} = \frac{20000}{480} = 41.6 \text{ or } 42 \text{ gtt/min}$$

(NOTE: Another method can be used for calculating the rate of flow of IVs. To calculate using this method, you must memorize the following table.)

INFORMATION SHEET

IV Set Calibrations	Division Factor
10 gtt/ml/cc	
15 gtt/ml/cc	
20 gtt/ml/cc	
60 gtt/ml/cc	

(NOTE: The calibration for 60 gtt/ml/cc would be for a microdrip infusion set.)

EXAMPLE: Physician orders a solution to infuse 120 ml/cc per hour. Using a 15 gtt/ml/cc set, how many gtt per minute should be infused?

120 4 = 30 gtt/min

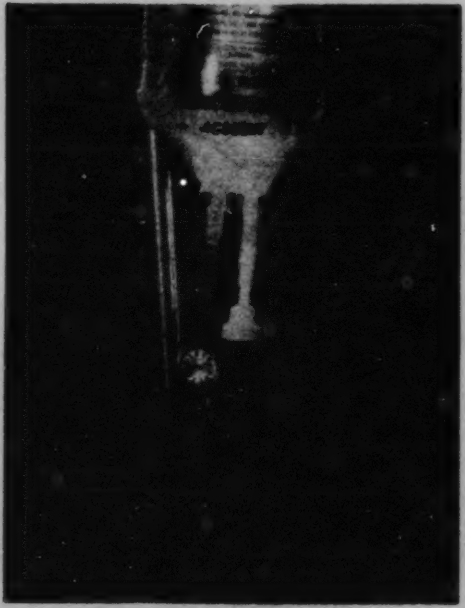
VIII. Method of checking flow rate of IVs

(NOTE: If a mechanical infusion pump is not being used, check the flow rate frequently. If you are monitoring several IVs during your shift, make a list of those patients receiving IVs, the time they will need additional fluids, and the rate prescribed for each.)

A. Flow rate

1. Count drops per minute, using second hand of your watch (Figure 2)

FIGURE 2



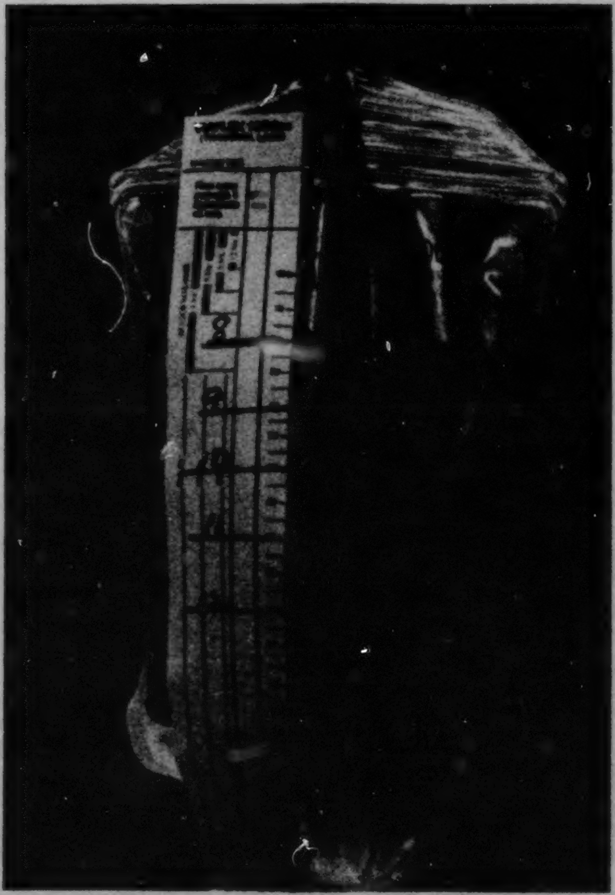
INFORMATION SHEET

2. Note amount of fluid remaining to determine if fluid is flowing at desired rate

   (NOTE: If a certain amount of fluid should be given in an hour, a significantly larger or smaller amount taken indicates that the flow is not constant. One method of evaluating amounts is to have a system to check the times for the IV solution to be at the required level. This method requires that the person who prepares the solution place a label on the bottle or bag, giving the hour at which the solution should be at that level. The label allows the person monitering the IV method to observe at once whether the rate of flow is on time. See Figure 3)

   (CAUTION: DO NOT mark bag with felt-tipped pen, as the substance could be picked up in solution.)

FIGURE 3



INFORMATION SHEET

B. Patency

1. Check outflow of blood from needle by lowering IV bottle or bag below IV site and observing for return of blood into tubing above hub of needle
2. Check at needle site if blood does not freely return into tubing; advance or pull back on needle, and then check again

IX. Commonly administered blood products

A. Whole blood

B. Packed red cells

C. Platelet concentrate (human)

D. Whole plasma (fresh or fresh frozen)

E. Albumin

(NOTE: This product is taken from a processed fraction of pooled plasma.)

F. Factor VIII

(NOTE: This product is the cold, insoluble part of fresh-frozen plasma used to replace fibrinogen.)

X. Signs or symptoms of reaction when blood or blood products are being administered

A. Chills

B. Urticaria (rash)

C. Temperature elevation

D. Nausea and vomiting

E. Dyspnea

F. Headache

G. Hematuria

H. Lower lumbar or sacral pain

I. Pain in the limb where vein is being used

XI. Steps to take if serious reaction occurs when administering blood or blood products

A. Clamp off blood tubing immediately and open saline line; reassure patient

B. Report symptoms and vital signs to charge nurse and/or physician

INFORMATION SHEET

C. Administer any medications needed to counter reaction

D. Document all symptoms and treatment

E. Make sure all of remaining product and equipment are sent back to laboratory

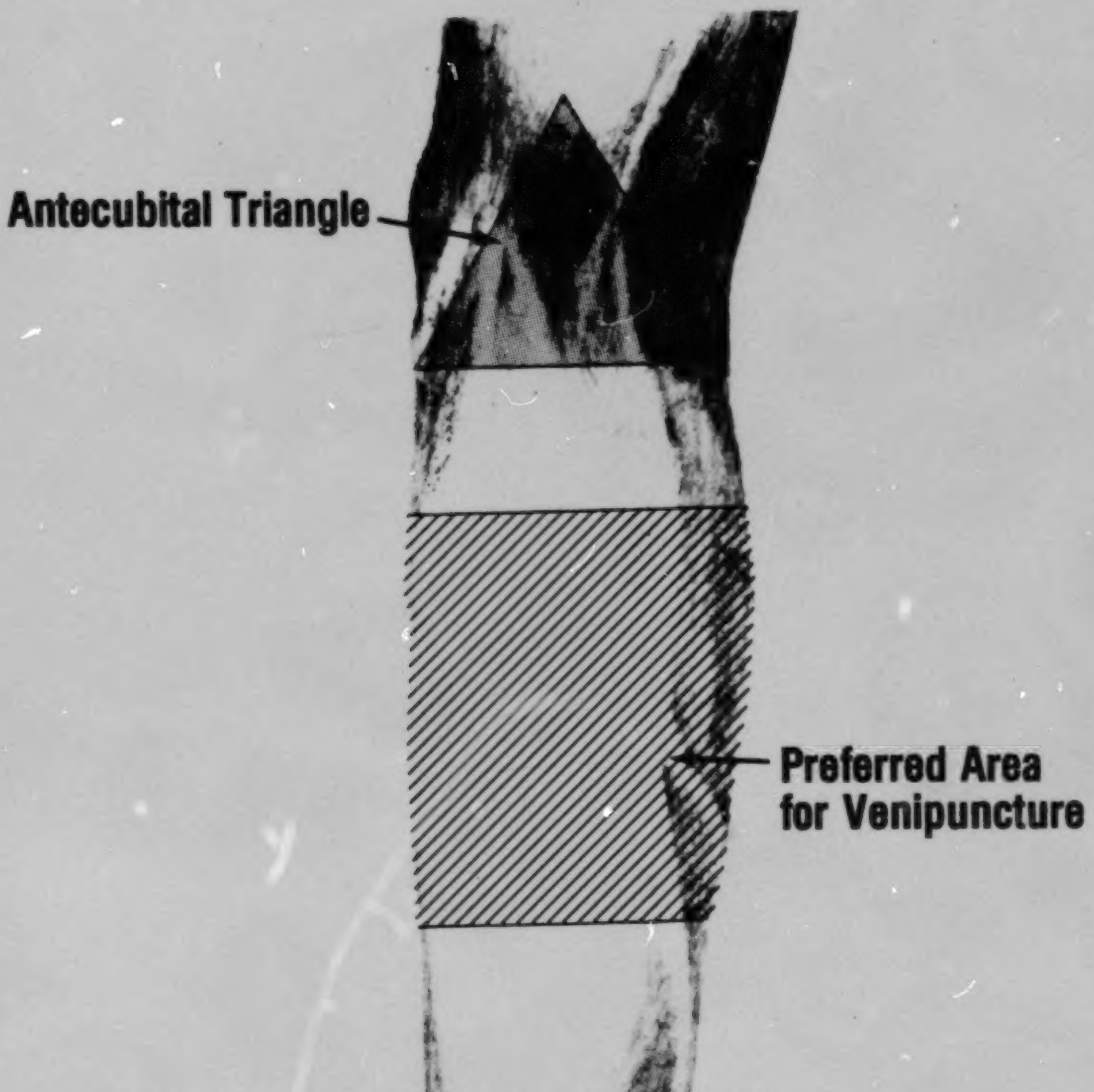
F. Save first urine specimen to be examined for red blood cells if requested

G. Keep accurate I and O

H. Observe patient closely and monitor vital signs as indicated

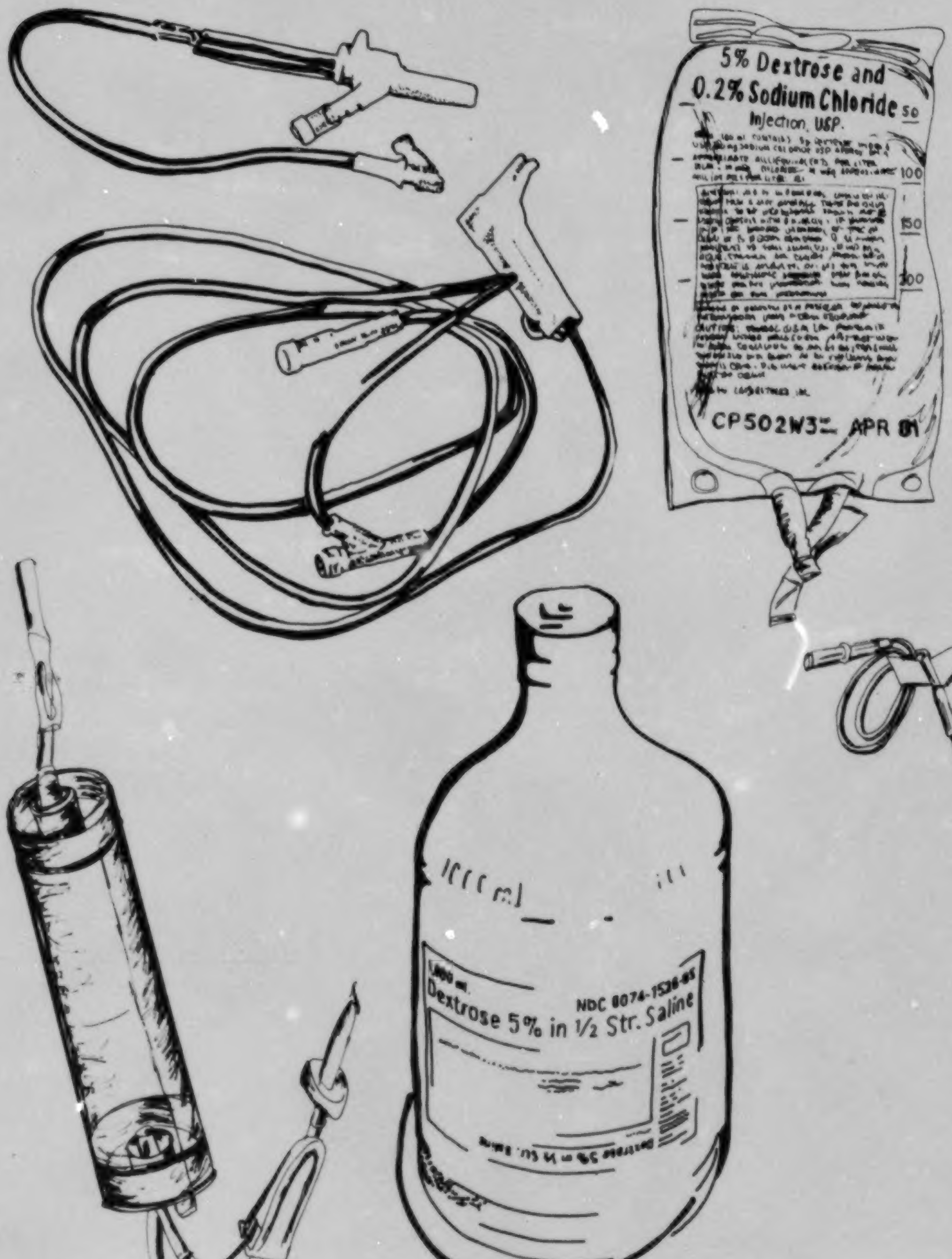
I. Complete all forms used to document reaction

Intravenous Sites in The Arm


Antecubital Triangle
Preferred Area for Venipuncture

PN II - 307-B

Intravenous Infusion Equipment


5% Dextrose and
0.2% Sodium Chloride
Injection, USP
50
100
150
200
CP502W3 APR 81
1000 ml
1,000 ml
NDC 0074-1526-05
Dextrose 5% in 1/2 Str. Saline

TM #2

INTRAVENOUS THERAPY
UNIT V

ASSIGNMENT SHEET #1--CALCULATE RATE OF FLOW OF IVS

NAME ______________________________ SCORE ______________

Select the correct answer for each of the following problems. Write an "X" in the blank before each correct answer. Show your work in the spaces provided.

A. Ordered: 2000 ml/cc of normal saline solution to run as continuous drip for twenty-four hours using a Cutter administration set (20 gtt/ml/cc).

_____1. 28 gtt/min _____2. 42 gtt/min _____3. 12 gtt/min

B. Ordered: 200 ml/cc of Ringer's lactate solution per day using a pediatric administration set (60 gtt/ml/cc).

_____1. 60 gtt/min _____2. 8 gtt/min _____3. 16 gtt/min

ASSIGNMENT SHEET #1

C. Ordered: 1000 ml/cc of 5% dextrose in normal saline with 10 gm of Staphcillin. Give in six hours using an Abbott administration set (15 gtt/ml/cc).

_____1. 48 gtt/min _____2. 42 gtt/min _____3. 24 gtt/min

D. Ordered: 1000 ml/cc of 5% dextrose in water (5% D/W) with 5,000,000 U of aqueous penicillin added. Administer with a Baxter set (10 gtt/ml/cc) and give 500,000 U of penicillin each hour.

_____1. 10 gtt/min _____2. 24 gtt/min _____3. 17 gtt/min

ASSIGNMENT SHEET #1

E. Ordered: Add 500 ml/cc normal saline to present IV for an eighteen-month-old infant. Run for ten hours using a pediatric administration set (60 gtt/ml/cc).

_____1. 50 gtt/min _____2. 25 gtt/min _____3. 30 gtt/min

INTRAVENOUS THERAPY
UNIT V

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1

A. 1

B. 2

C. 2

D. 3

E. 1

INTRAVENOUS THERAPY
UNIT V

JOB SHEET #1--CARE FOR A PATIENT RECEIVING INTRAVENOUS THERAPY

(NOTE: Your responsibilities in intravenous therapy will depend upon your qualifications, your experience, and the hospital policies. Each facility will have its own procedure book that will give you guidelines of what equipment is used and how intravenous therapy is managed. If you are inexperienced, the facility will give you a thorough inservice on IV techniques.)

I. Equipment

A. IV standard

(NOTE: This may be a standard on wheels, or an IV pole fastened to the patient's bed. If the infusion pump is utilized, it will be a part of the equipment.)

B. Solution to be administered (either bottle or bag)

C. Labels for solution

D. Tubing with drip regulator, control valve, or clamp

(NOTE: The type of tubing needed will depend on the solution. A special blood tubing is used on blood and blood products.)

E. Sterile needles or IV catheters

F. Filters (optional)

G. Splints or armboards

H. Tape

I. Alcohol sponges

J. Tourniquet

K. Antibiotic ointment

L. Adhesive strips

M. Watch with second hand

II. Procedure for assisting in starting an IV

(NOTE: If you are asked to assist in starting an IV, the person performing the procedure will request the appropriate equipment.)

A. Wash hands

B. Identify patient and explain procedure

JOB SHEET #1

C. Assemble equipment as directed

(NOTE: DO NOT gather equipment and place at bedside until the procedure is to take place. The patient may become anxious just looking at the equipment and anticipating the procedure.)

D. Assist as needed and reassure patient

III. Procedure for care during administration of an IV

A. Monitor rate of flow as frequently as needed; use second hand on watch to time drops

B. Observe for swelling around needle; evaluate circulation status

C. Take care, when moving patient or changing gown or pajamas, that tubing and needle are not pulled or strained

(NOTE: When removing gown or pajamas, remove unrestricted arm first, then move the arm with IV last and remove tubing and container through armhole. Reverse the procedure for regowning.)

D. Document any problems and report to charge nurse or physician

IV. Procedure for assisting in starting a blood transfusion

(NOTE: As an LPN, you will not be responsible for starting a blood or blood product, but you will be responsible for monitoring the patient and the IV procedure.)

A. Wash hands

B. Identify patient and explain procedure

C. Assemble equipment as directed

D. Take vital signs and record

E. Assist as needed and reassure patient

V. Procedure for care during administration of a blood transfusion

A. Monitor rate of flow as indicated

B. Observe for any untoward signs or symptoms and report at once

C. Monitor vital signs as indicated

VI. Procedure for discontinuing IV

A. Check physician's order

B. Wash hands

JOB SHEET #1

C. Obtain all equipment needed

EXAMPLES: Alcohol sponges, adhesive strip, antiseptic or antibiotic ointment if indicated

D. Identify patient and explain procedure

E. Clamp off tubing

F. Remove tape over needle carefully, while stabilizing needle with other hand

G. Place alcohol sponge over needle site

H. Withdraw needle or catheter, using a steady, gentle movement while applying gentle pressure with alcohol sponge in other hand

I. Maintain gentle pressure for a short time, checking to see if bleeding has stopped

J. Apply adhesive strip

K. Provide for patient's comfort

L. Remove all equipment and note amount of solution left in container, if any; add to I and O sheet amount infused

M. Discard equipment properly

N. Document procedure

1. Time infusion was discontinued
2. Type and amount of fluid left in container
3. Response of patient
4. Your name and title

JOB SHEET #1

VII. Checklist for assisting in starting an IV

		Performed Well	Needs Improvement
A.	Washed hands correctly	☐	☐
B.	Identified patient and explained procedure	☐	☐
C.	Assembled equipment as directed	☐	☐
D.	Assisted as needed and reassured patient	☐	☐

Comments: ____

____

____

____

____

VIII. Checklist for care during administration of an IV

		Performed Well	Needs Improvement
A.	Monitored rate of flow as frequently as needed, used second hand on watch to time drops	☐	☐
B.	Observed for swelling around needle; evaluated circulation status	☐	☐
C.	Took care, when moving patient or changing gown or pajamas, that tubing and needle were not pulled or strained; documented	☐	☐

Comments: ____

____

____

____

____

JOB SHEET #1

IX. Checklist for assisting in starting a blood transfusion

		Performed Well	Needs Improvement
A.	Washed hands correctly	☐	☐
B.	Identified patient and explained procedure	☐	☐
C.	Assembled equipment as directed	☐	☐
D.	Took vital signs and recorded them	☐	☐
E.	Assisted as needed and reassured patient	☐	☐

Comments:

X. Checklist for administration of a blood transfusion

		Performed Well	Needs Improvement
A.	Monitored rate of flow as indicated	☐	☐
B.	Observed for any untoward signs or symptoms and reported at once	☐	☐
C.	Monitered vital signs as indicated	☐	☐

Comments:

JOB SHEET #1

XI. Checklist for discontinuing IV

		Performed Well	Needs Improvement
A.	Checked physician's order	☐	☐
B.	Washed hands correctly	☐	☐
C.	Obtained all equipment needed	☐	☐
D.	Identified patient and explained procedure	☐	☐
E.	Clamped off tubing and carefully removed tape over needle, while stabilizing needle with other hand	☐	☐
F.	Placed alcohol sponge over needle site and withdrew needle or catheter, using a steady, gentle movement while applying gentle pressure with alcohol sponge in other hand	☐	☐
G.	Maintained gentle pressure for a short time, checking to see if bleeding had stopped	☐	☐
H.	Applied adhesive strip and provided for patient's comfort	☐	☐
I.	Removed all equipment and noted amount of solution left in container; added to I and O sheet amount infused	☐	☐
J.	Discarded equipment properly, and documented procedure correctly	☐	☐

Comments: ____

____

____

____

____

INTRAVENOUS THERAPY
UNIT V

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with intravenous therapy to their correct definitions. Write the correct numbers in the blanks. Definitions are continued on next page.

_____ a. Fluid portion of blood after cells have been removed

_____ b. Method by which large quantities of fluids and nutrients are administered to a patient via a large blood vessel, usually the subclavian vein or vena cava

_____ c. State of being open or unobstructed

_____ d. Within the vein

_____ e. Erythrocytes from a unit of blood with most of the plasma removed

_____ f. Chief protein of blood serum

_____ g. Hardened area of tissue

_____ h. Small tubular instrument for insertion into a blood vessel or body cavity

_____ i. Special device developed to provide constant but regulated flow of solutions given intravenously

_____ j. Injection of fluids into subcutaneous tissues to supply body with liquids

_____ k. Product prepared from single unit of whole blood or plasma and suspended in a specific volume of the original plasma

_____ l. Large amount of air in the heart or vascular system

_____ m. Blood (usually clotted) in an organ, tissue, or space; caused by a break in a blood vessel

_____ n. Complete blood product with all components intact

1. Hematoma
2. Cannula
3. Hyperalimentation
4. Patency
5. Intravenous
6. Air embolus
7. Platelet concentrate (human)
8. Infusion pump
9. Whole plasma
10. Hypodermoclysis
11. Serum albumin
12. Induration
13. Packed red cells
14. Infiltration
15. Whole blood
16. Thrombophlebitis

TEST

_____ o. Inflammation of a vein developing with the formation of a thrombus (blood clot)

_____ p. Process of substance passing into and being deposited within a cell, tissue, or organ

2. List purposes of intravenous therapy.

   a. ______________________________

   b. ______________________________

   c. ______________________________

3. Describe advantages and disadvantages of IV administration methods.

   a. Direct (bolus)--______________________________

   ____

   ____

   ____

   b. Intermittent-- ______________________________

   ____

   ____

   ____

   c. Continuous drip (primary)--______________________________

   ____

   ____

   ____

4. State precautions that should be observed in administering intravenous fluids.

   a. ______________________________

   b. ______________________________

   c. ______________________________

5. Describe signs, symptoms, appropriate treatments, and preventive measures of possible problems of IV therapy.

   a. Infiltration-- ______________________________

   ____

   ____

TEST

b. Systemic infection--

c. Thrombophlebitis--

6. State nursing responsibilities for monitoring IVs.

   a.

   b.

   c.

   d.

TEST

e. ______________________________

____

____

f. ______________________________

____

____

7. Calculate rate of flow of IVs, using a formula to solve the following problem. Show your work on this page, and write answer in the blank.

Give 1000 ml. 5% dextrose in water (D 5/W) IV in 2 hours.

Use the Abbott administration.

Regulate IV to flow at ____________ gtt/minute

8. Describe method of checking flow rate of IVs.

a. Flow rate-- ______________________________

____

____

b. Patency-- ______________________________

____

____

9. List commonly administered blood products.

a. ______________________________

b. ______________________________

TEST

c. ____________________

d. ____________________

e. ____________________

f. ____________________

10. Select from the following list signs or symptoms of reaction when blood or blood products are being administered. Write an "X" in the blank before each correct answer.

_____a. Headache

_____b. Hematuria

_____c. Diarrhea

_____d. Temperature elevation

_____e. Urticaria (rash)

_____f. Dyspareunia

_____g. Nausea and vomiting

_____h. Chills

_____i. Dyspnea

_____j. Dystocia

_____k. Lower lumbar or sacral pain

_____l. Pain in the limb where vein is being used

11. Arrange in order steps to take if serious reaction occurs when administering blood or blood products. Write a "1" before the first step, a "2" before the second step, and so on.

_____a. Document all symptoms and treatment

_____b. Administer any medications needed to counter reaction

_____c. Make sure all of remaining product and equipment are sent back to laboratory

_____d. Clamp off blood tubing immediately and open saline line; reassure patient

_____e. Save first urine specimen to be examined for red blood cells if requested

_____f. Report symptoms and vital signs to charge nurse and/or physician

TEST

_____g. Keep accurate I and O

_____h. Observe patient closely and monitor vital signs as indicated

_____i. Complete all forms used to document reaction

(NOTE: Test question 12 lists a job sheet. It is an important part of this test. If it has not been completed, check with your instructor.)

12. Demonstrate the ability to care for a patient receiving intravenous therapy.

INTRAVENOUS THERAPY
UNIT V

ANSWERS TO TEST

1. a. 9
   b. 3
   c. 4
   d. 5
   e. 13
   f. 11
   g. 12
   h. 2
   i. 8
   j. 10
   k. 7
   l. 6
   m. 1
   n. 15
   o. 16
   p. 14

2. a. Injection of drugs to provide immediate or controlled effects
   b. Introduction of food, fluids, or drugs when oral administration is inadvisable
   c. Replacement of fluids and electrolytes

3. Descriptions should include the following
   a. Direct (bolus)
      1) Drugs are injected directly into vein; therefore, effects are seen sooner
      2) Irritation of vein and shock from the effects of medication, if not given slowly, may be seen
   b. Intermittent
      1) Less likely to cause irritation to vein, and since it is administered over a longer period of time, it is less likely to cause shock from effects of drug
      2) Increased chance of contamination if port of entry for the additive set is used more than one time; without adequate knowledge of solutions and drugs, mixing medications may result in incompatibilities
   c. Continuous drip (primary)
      1) Less irritating to vein than bolus and requires less mixing and hanging than intermittent infusion
      2) Flow rate must be monitored very carefully, and solutions used must be able to remain stable for the period of time

ANSWERS TO TEST

4. a. Know the IV equipment and be familiar with each item and how it is used

   b. Keep all equipment sterile; if in doubt, DO NOT USE

   c. Check bottle or bag for any leaks or cracks; check labels for correct solution and/or any additive drugs; check for cloudiness or sediment

5. Descriptions should include the following

   a. Infiltration

      1) Coolness and swelling around site of IV

      2) Absence of blood flow in tubing when bottle or bag is lowered below IV site

      3) Flow rate slows or stops completely

      4) Report problem and if qualified discontinue IV if ordered

      5) If swelling is small, apply ice; if larger area, apply warm, moist compresses

      6) Use some type of splint to stabilize the needle or catheter to prevent it from becoming displaced

   b. Systemic infection

      1) Rise in temperature and pulse, changes in blood pressure, and chilling

      2) Look for other sources first: Get culture on urine, sputum, or blood, depending on condition

      3) IV should be discontinued and supplies sent to lab for bacterial analysis

      4) IV should be restarted in another limb

      5) ALWAYS keep equipment sterile; avoid any contamination; and if you suspect any part of the IV setup has been disconnected or contaminated, replace with sterile one

   c. Thrombophlebitis

      1) Swelling of limb; vein becomes sore, hard, and warm to touch; possible appearance of red streaks about the IV site

      2) Discontinue IV and apply warm, moist compresses

      3) Notify physician

      4) Always begin with a large enough vein to carry the load, dilute irritating additives, keep flow rate at prescribed rate, and stabilize needle with a splint

ANSWERS TO TEST

6. a. Be sure that patient receives specified amount of fluid prescribed at the rate ordered

   b. Frequently check equipment, patient response, site of administration, and physician's orders for additional or new requests

   c. Fill out appropriate forms to document intravenous therapy

   d. Explain all procedures of treatment to patient and family and ask for their assistance in monitoring process

   e. Add additional fluids after infusion of previous bottle or bag, making sure that the correct solution is added and that tubing is free from air

   f. Change IV tubing as indicated by your hospital policy, usually every twenty-four hours

7. Volume--1000 ml
   Gtt/ml/cc--15
   Infusion time in minutes--120

   $$\frac{1000 \times 15}{120} = \frac{15{,}000}{120} = 125 \text{ gtt/minute}$$

   Regulate IV to flow at 125 gtt/minute

8. Descriptions should include the following

   a. Flow rate

      1) Count drops per minute, using second hand of your watch

      2) Note amount of fluid remaining to determine if fluid is flowing at desired rate

   b. Patency

      1) Check outflow of blood from needle by lowering IV bottle or bag below IV site and observing for return of blood into tubing above hub of needle

      2) Check at needle site if blood does not freely return into tubing; advance or pull back on needle, and then check again

9. a. Whole blood

   b. Packed red cells

   c. Platelet concentrate (human)

   d. Whole plasma (fresh or fresh frozen)

ANSWERS TO TEST

e. Albumin

f. Factor VIII

10. a, b, d, e, g, h, i, k, l

11. a. 4
b. 3
c. 5
d. 1
e. 6
f. 2
g. 7
h. 8
i. 9

12. Performance skills evaluated to the satisfaction of the instructor

DOCUMENTATION OF MEDICATIONS
UNIT VI

UNIT OBJECTIVE

After completing this unit, the student should be able to document the administration of medications accurately. This knowledge will be shown by completing an assignment sheet and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Select from a list information to document after giving oral medications.
2. List information to document after insertion of a suppository.
3. Select from a list information to document after giving a subcutaneous or intramuscular injection.
4. State information to document prn medications.
5. Describe methods of documenting the administration of narcotics.
6. State information to document when a medication is not given.
7. Transcribe and document physicians' orders and sdministration of medications.

DOCUMENTATION OF MEDICATIONS
UNIT VI

SUGGESTED ACTIVITIES

I. Suggested activities

   A. Obtain all chart forms used in your hospital to use for students to practice transcribing orders and documenting administration of medications.

      (NOTE: Set up mock charts and/or patient profiles, medication cards, Kardex, and other forms with simulated patient data for students to use for practice.)

   B. Provide students with objective sheet.

   C. Provide students with information and assignment sheets.

   D. Discuss unit and specific objectives.

   E. Discuss information and assignment sheets.

   F. Develop appropriate learning activities for special-needs students.

   G. Review any terminology that may be needed to chart correctly.

   H. Give test.

   I. Reteach if necessary.

II. Instructional materials

   A. Objective sheet

   B. Suggested activities

   C. Information sheet

   D. Assignment Sheet #1--Transcribe and Document Physicians' Orders and Administration of Medications

   E. Answers to assignment sheet

   F. Test

   G. Answers to test

III. Unit reference--Robinson, Jean, ed. *Giving Medications.* Horsham, Pennsylvania: Nursing80 Photobook, Intermed Communications, Inc., 1980.

DOCUMENTATION OF MEDICATIONS
UNIT VI

INFORMATION SHEET

I. Information to document after giving oral medications

(NOTE: Each hospital uses various methods and forms for documenting the administration of medications. Whether patient profile, medication card, Kardex, chart with nurses notes, or a type of flow sheet is used, the same information will need to be given.)

A. Time given

B. Name of drug

C. Dosage

D. Route of administration

E. Name or initials of nurse giving the medication

EXAMPLE: 9:00 A.M. Valium 5 mg po, Sarah Jensen, LPN

F. Response of patient

II. Information to document after insertion of a suppository

A. Time inserted

B. Name of drug

C. Dosage

D. Site of insertion

E. Results or reaction

(NOTE: Some suppositories [vaginal, urethral, and rectal] are given to be retained for various treatment actions. Some rectal suppositories are given to aid in the emptying of the bowel. If this is the desired action of the suppository, documentation should show that patient was instructed to retain the suppository as long as possible. The time of the results, and the appearance and amount of the results are also included.)

F. Name or initials of nurse giving the medication

EXAMPLE: 7:00 A.M. Dulcolax suppository 10 mg. Inserted rectally.
P. Dungan, LPN

INFORMATION SHEET

III. Information to document after giving a subcutaneous or intramuscular injection

A. Time given

B. Name of drug

C. Dosage

D. Method and site of administration

E. Reaction

F. Name or initials of nurse giving medication

EXAMPLE: 8:00 A.M. Staphcillin gm 1 given in the UOQ of the right gluteus medius muscle. C/O some burning from the medication. Judy Walker, SPN

8:30 A.M. No c/o burning in the IM site. Judy Walker, SPN

IV. Information to document prn medications

A. Time given

B. Name of drug

C. Dosage

D. Method of administration

E. Reason for giving medication

F. Name or initials of nurse giving medication

G. Reaction or response of the patient

EXAMPLE: 10:00 P.M. Vistaril 50 mg given IM in the UOQ of the right gluteus medius muscle for c/o nausea. John Scott, LPN

10:45 P.M. Resting comfortably on left side. "Nausea has gone away." John Scott, LPN

V. Methods of documenting the administration of narcotics

(NOTE: Each hospital will have its own system of controlling the administration of narcotic drugs. Hospital policy will dictate the system of checking and double-checking the amount of narcotic drugs given. Be aware that you are legally responsible for this procedure and will be held accountable for any errors made.)

A. On narcotic or sedative record

1. Time

2. Name of drug

INFORMATION SHEET

3. Dosage

   (NOTE: When you must destroy or waste a portion of the drug, you must ask another licensed person to witness the act, document where and how this was done, and initial the form that you use to sign out the medication.)

4. Name of patient

5. Name of physician

6. Signature of nurse(s)

B. On patient's record or chart

1. Time given

2. Name of drug

3. Dosage

4. Method of administration

5. Reaction

6. Reason for giving medication

   (NOTE: Narcotics or sedatives usually are given as a prn medication or as a sleeper for rest. It is best to state the reason that you have given the medication and the results when you check the patient at an appropriate interval after administration of the drug.)

7. Name or initials of nurse giving drug

VI. Information to document when a medication is not given

A. Time

B. Name of medication and dosage

C. Reason for not giving medication

D. Name or initials of nurse assigned to give the medication

(NOTE: Hospitals have different ways of documenting this information. One method of documentation is to circle the dose not given and to write the reason in the nurse's notes.)

E. Action taken, if any

EXAMPLE: 10:00 A.M. Milk of Magnesia 1 oz not given, c/o nausea and diarrhea. Physician notified. Madge Lawson, LPN

DOCUMENTATION OF MEDICATIONS
UNIT VI

ASSIGNMENT SHEET #1--TRANSCRIBE AND DOCUMENT PHYSICIANS' ORDERS AND ADMINISTRATION OF MEDICATIONS

NAME ______________________________ SCORE ____________

Two sets of orders are given in this assignment sheet to be used in practicing transcribing physicians' orders and documenting administration of medications. These orders have been written by physicians for fictitious patients but could be orders for these particular conditions. Transcribe physicians' orders, using the forms provided for you by your instructor. Document the administration of the medications you would be responsible for if you were working the seven-to-three shift. Use the correct forms provided for you by your instructor. Hand in for evaluation.

PN II - 343-B

ASSIGNMENT SHEET #1
ORDERS SET #1

GOLDEN MEDICAL CENTER
GREAT CITY, STATE 23048

Jamison, Rebecca Ann
#44509 Room #402
Dr. S. Earnest

PHYSICIAN'S ORDERS

DATE ORDERED	R X	NO.	PHYSICIAN'S ORDERS
3/19/82		①	Admit Dx Partial Bowel Obstruction
		②	NPO c̄ ice chips
		③	Bed Rest c̄ BSC c̄ constant
			attendance
		④	Hydrocortisone 25mg IV Q12h.
		⑤	V/S routine
		⑥	N-G tube to low Gomco
		⑦	IV #1 1000 cc D-5½NS + 30mEq
			KCl
			#2 1000cc D-5-W + 30mEq KCl
			#3 1000cc D-5½NS+30mEq KCl
			Run each 6h -
		⑧	6hr. urine Amylase
		⑨	Flat-Upright Abd.
		⑩	Consult Dr. Phillips
		⑪	Needle precaution bec.
			pt. has Chr. Active Hepatitis
		⑫	Seconal 100mg IM hs
		⑬	CBC-UA-lytes-BUN-Bld Sugar,
			CXR-EKG now

Adapted with permission of Fenton Office Supply Company, Stillwater, Oklahoma.

ASSIGNMENT SHEET #1

ORDERS SET #1

GOLDEN MEDICAL CENTER
GREAT CITY, STATE 23048

Jamison, Rebecca Ann
#44509 Room #402
Dr. S. Earnest

PHYSICIAN'S ORDERS

DATE ORDERED	R X	NO.	PHYSICIAN'S ORDERS
3/19/82		①	Op permit for Expl. laparotomy
		②	Nebcin 60mg IM
		③	Cleocin 300mg IM) now
		④	Transfer to Dr. Phillips 5th floor
		⑤	Foley cath. now
		⑥	Pre op meds
			Solucortef 100mg IM
			Vistaril 50mg
			Demerol 50mg) IM
			Atropine 0.2mg
		⑦	Post op Orders
		⑧	Rout post op orders
		⑨	I & O
		⑩	IV's 1000cc D-5 1/2 NS @ 125cc/hr
			Repeat prn
		⑪	Demerol 50mg) IM. Q3-4h prn
		⑫	Vistaril 50mg) pain
		⑬	Compazine 25mg q6h prn nausea
		⑭	N-G tube to low Gomco
		⑮	Irrigate N-G tube c̄ 30cc NSS q12h

Adapted with permission of Fenton Office Supply Company, Stillwater, Oklahoma.

ASSIGNMENT SHEET #1

ORDERS SET #1

GOLDEN MEDICAL CENTER
GREAT CITY, STATE 23048

Jamison, Rebecca Ann
#44509 Room #402
Dr. S. Earnest

PHYSICIAN'S ORDERS

DATE ORDERED	RX	NO.	PHYSICIAN'S ORDERS
		16	Foley to gravity
		17	Bed Rest
		18	Encourage deep breathing
		19	Hydrocortisone 25 mg IV q 8h
		20	Add ī amp MVI-12 to IV daily

Adapted with permission of Fenton Office Supply Company, Stillwater, Oklahoma.

PN II - 347-B

ASSIGNMENT SHEET #1

ORDERS SET #2

GOLDEN MEDICAL CENTER
GREAT CITY, STATE 23048

Strunk, Susie
#79113 Room #202
Dr. L. Trotter

PHYSICIAN'S ORDERS

DATE ORDERED	RX	NO.	PHYSICIAN'S ORDERS
			Septic incomplete abortion - 1st trimester
3/25/82		①	Complete bedrest c̄ B.R.P.'s as desired
		②	CBC and UA
		③	sed. rate
		④	blood cultures X 2
		⑤	dalmane 30 mgs H.S. p.r.n
		⑥	full liquid diet as tolerated
		⑦	IV fluids:
			A) 1000cc's Ringer's lactate
			c̄ i gram Keflin added to run X 6 hrs
			B) repeat A exactly to
			run X 8 hrs
			C) repeat B exactly
		⑧	R.I.A. pregnancy test tomorrow AM.
		⑨	vistaril 50 mg IM q 3-4 hrs p.r.n
			nausea
		⑩	motrin 600 mg ii tabs initially;
			then i tab Q.I.D. P.O. prn cramping;

Thanks, L. F. Trotter

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348-B

ASSIGNMENT SHEET #1

ORDERS SET #2

GOLDEN MEDICAL CENTER
GREAT CITY, STATE 23048

Strunk, Susie
#79113 Room #202
Dr. L. Trotter

PHYSICIAN'S ORDERS

DATE ORDERED	RX	NO.	PHYSICIAN'S ORDERS
3/2/82		①	Hct and Hgb today please.
		②	D.C. IV fluids
		③	Keflex 500 mg Q.i.d. P.O. while awake
		4.	may have cleansing enema p.r.n. constipation
		⑤	flat plate and upright X-ray of abd.
		⑥	may take Vistaril 50-100 mg q 3-4 hr P.O. instead of IM.
3/27/82		①	Wyanoid HC suppos. T.i.d. or Q.i.d. p.r.n. hemorrhoids
		②	Gyne-Lotrimin vaginal tab inserted ī q AM and PM
		③	may be up ambulating as desired.

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DOCUMENTATION OF MEDICATIONS
UNIT VI

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

DOCUMENTATION OF MEDICATIONS
UNIT VI

TEST

NAME ______________________________ SCORE __________

1. Select from the following list information to document after giving oral medications. Write an "X" in the blank before each correct answer.

_____a. Time given

_____b. Name of physician

_____c. Contraindications

_____d. Route of administration

_____e. Name of drug

_____f. Response of patient

_____g. Name of pharmacist

_____h. Dosage

_____i. Name or initials of nurse giving the medication

_____j. Action of drug

2. List information to document after insertion of a suppository.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

3. Select from the following list information to document after giving a subcutaneous or intramuscular injection. Write an "X" in the blank before each correct answer.

_____a. Reaction

_____b. Name of drug

_____c. Name or initials of nurse giving medication

_____d. Name of physician

TEST

_____e. Time given

_____f. Reason for giving medication

_____g. Method and site of administration

_____h. Dosage

4. State information to document prn medications.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

f. ____________________

g. ____________________

5. Describe methods of documenting the administration of narcotics.

a. On narcotic or sedative record--____________________

b. On patient's record or chart--____________________

TEST

6. State information to document when a medication is not given.

   a. ____

   b. ____

   c. ____

   d. ____

   e. ____

(NOTE: Test question 7 is an assignment sheet. It is an important part of this test. If it has not been completed, check with your instructor.)

7. Transcribe and document physicians' orders and administration of medications.

DOCUMENTATION OF MEDICATIONS
UNIT VI

ANSWERS TO TEST

1. a, d, e, f, h, i
2. a. Time inserted
   b. Name of drug
   c. Dosage
   d. Site of insertion
   e. Results or reaction
   f. Name or initials of nurse giving the medication
3. a, b, c, e, g, h
4. a. Time given
   b. Name of drug
   c. Dosage
   d. Method of administration
   e. Reason for giving medication
   f. Name or initials of nurse giving medication
   g. Reaction or response of the patient
5. Descriptions should include the following
   a. On narcotic or sedative record
      1) Time
      2) Name of drug
      3) Dosage
      4) Name of patient
      5) Name of physician
      6) Signature of nurse(s)

ANSWERS TO TEST

- b. On patient's record or chart
  - 1) Time given
  - 2) Name of drug
  - 3) Dosage
  - 4) Method of administration
  - 5) Reaction
  - 6) Reason for giving medication
  - 7) Name or initials of nurse giving drug

6. a. Time
   - b. Name of medication and dosage
   - c. Reason for not giving medication
   - d. Name or initials of nurse assigned to give the medication
   - e. Action taken, if any

7. Evaluated to the satisfaction of the instructor

INTRODUCTION TO MATERNAL AND INFANT CARE
UNIT I

UNIT OBJECTIVE

After completing this unit, the student should be able to compile a report on current issues concerning pregnancy and infant care. This knowledge will be shown by completing the assignment sheet and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with maternal and infant care to their correct definitions.
2. Match historical persons to their contributions to obstetrics.
3. Describe current trends in maternal and infant care.
4. List information given in prepared childbirth classes.
5. Select from a list advantages of prepared childbirth.
6. Compile a report on current issues concerning pregnancy and infant care.

INTRODUCTION TO MATERNAL AND INFANT CARE
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities

   A. Provide students with objective sheet.

   B. Provide students with information and assignment sheets.

   C. Discuss unit and specific objectives.

   D. Discuss information and assignment sheets.

   E. Invite a prepared childbirth educator to visit, or ask permission for class to attend a childbirth class.

   F. Contact the state health department to obtain current vital statistics concerning birth rate and maternal and fetal morbidity and mortality rates.

   G. Make a bulletin board of articles that address current issues on pregnancy.

   H. Visit the obstetrical department in your hospital.

   I. Discuss agencies in your community concerned with maternal and child care.

   J. Give test.

   K. Reteach if necessary.

II. Instructional materials

   A. Objective sheet

   B. Suggested activities

   C. Information sheet

   D. Assignment Sheet #1--Compile a Report on Current Issues Concerning Pregnancy and Infant Care

   E. Answers to assignment sheet

   F. Test

   G. Answers to test

SUGGESTED ACTIVITIES

III. Unit references

A. Anderson, Barbara, and Pamela Shapiro. *Obstetrics for the Nurse,* 3rd edition. Albany, New York: Delmar Publishers, 1979.

B. Jensen, Margaret Duncan, Ralph C. Benson, and Irene M. Bobab. *Maternity Care: The Nurse and the Family.* St. Louis, Missouri: C.V. Mosby Company, 1977.

INTRODUCTION TO MATERNAL AND INFANT CARE
UNIT I

INFORMATION SHEET

I. Terms and definitions

A. Nurse-midwife--Qualified, registered professional who has evidence of certification according to the requirements of the American College of Nurse-Midwives and who has a right to use the title

B. Parturition--Process of giving birth to young; childbirth

C. Labor--Series of processes, especially the coordinated, periodic uterine contractions, whereby the fetus is expelled in parturition

D. Delivery--Expulsion or extraction of a fetus and its membranes; parturition

E. Embryo--Product of conception from the moment of fertilization to the end of the eighth week after fertilization

F. Fetus--Developing body in utero from the beginning of the ninth week after fertilization until birth

G. Pregnancy--State of the woman from conception to childbirth; gestation

H. Obstetrics--Branch of medicine concerning the care of women during pregnancy, labor, and puerperium

I. Obstetric forceps--Large, double-bladed traction forceps used to assist in difficult or delayed labor

J. Cesarean section--Delivery of the fetus through an abdominal incision

K. Puerperal sepsis--Febrile state caused by infection of the endometrium and septicemia following delivery; childbed fever

L. Puerperium--State of a woman in labor or of one who has just been delivered; the period from delivery to the time when the uterus has regained its normal size, usually about six weeks

M. Natal--Pertaining to birth

N. Abortion--Artificially induced or spontaneous expulsion of an embryo or fetus before it is viable

O. Miscarriage--Lay term for *abortion*

P. Term--Time of expected delivery

Q. EDC--Expected date of confinement

R. Premature delivery--Expulsion of the fetus after the twenty-eighth week and before term

INFORMATION SHEET

S. Implantation--Embedding of the embryo into, or on, the endometrium

T. Prepared childbirth--Form of childbirth in which psychological, physiological, and emotional aspects are emphasized in order to educate the patient for labor and, when possible, to reduce or eliminate the use of drugs

(NOTE: Prepared childbirth may also be called *natural childbirth* or *preparation for childbirth.*)

II. Historical persons and their contributions to obstetrics

A. William Harvey (1578-1657)--Described the circulation of blood and physiology of pregnancy

B. Peter Chamberlen (1560-1631)--Invented original obstetric forceps

(NOTE: Although Dr. Chamberlen designed and used the forceps about 1580, the family kept the instrument secret until 1813.)

C. Alexander Gordon--First demonstrated the contagiousness of puerperal sepsis in Scotland, 1796

(NOTE: In the seventeenth to nineteenth centuries, puerperal sepsis reached epidemic proportions.)

D. Oliver Wendell Holmes--In 1843, wrote a paper about medical aseptic techniques useful in combating puerperal sepsis

E. Ignaz Semmelweis--In 1847, proved that puerperal sepsis was contagious and could be prevented by aseptic technique

F. William Thomas Green Morton--Considered to be the "Father of general anesthesia "

III. Current trends in maternal and infant care (Assignment Sheet #1)

A. Changing family roles

1. Emphasis on family-centered maternity care

EXAMPLES: Availability of childbirth classes, father or support person in delivery room, siblings allowed to visit mother, birthing centers

2. More holistic approach to prenatal care, labor and delivery, and the puerperium stages of pregnancy

B. Changing nursing roles

1. An increase in nurse-midwives, specially prepared nurses who supervise prenatal care, delivery, and postnatal care

2. More of a team approach as various levels of professionals provide maternity care

INFORMATION SHEET

C. Changing delivery techniques

   1. Movement back to home childbirth or to birthing centers with midwives or even fathers or support persons delivering the infant

   2. Perfection of various types of birthing techniques

      EXAMPLES: Lamaze, Leboyer

   3. Movement to bring back a modern version of childbirth stool

D. New conception methods

   1. Many couples electing to use artificial insemination, using the father's sperm or donor sperm

   2. Surrogate mothers conceiving and delivering infants for women who are unable to conceive and/or carry a full-term pregnancy

      (NOTE: This is a controversial issue at this time, with many ethical and legal implications.)

   3. Embryos conceived in test tubes, using mother's ovum and father's sperm and later implanted into the mother; this technique is used for women who are unable to conceive but are able to carry the pregnancy

IV. Information given in prepared childbirth classes

   A. Education about pregnancy and childbirth to dispel fears and apprehensions

   B. Methods of exercising to strengthen and increase flexibility of muscles used in labor

      EXAMPLES: Pelvic rocking, tailor sitting, squatting and kneeling

   C. Methods of completely relaxing muscles

   D. Instruction concerning breathing and proper use of muscles as conditioning for labor and delivery

   E. Instructions to father-to-be so that he may help throughout pregnancy and labor

V. Advantages of prepared childbirth

   A. Decreases use of analgesia and anesthesia and possibilities of side effects in mother and infant

   B. Enhances maternal and paternal relationship by allowing both parents to participate in birth process

INFORMATION SHEET

C. Reduces fear and anxiety through knowledge and understanding

D. Reduces in infant number of complications seen with other types of labor and delivery methods

E. Develops tone in muscles used in childbirth process

INTRODUCTION TO MATERNAL AND INFANT CARE
UNIT I

ASSIGNMENT SHEET #1--COMPILE A REPORT ON CURRENT ISSUES CONCERNING PREGNANCY AND INFANT CARE

NAME ______________________________ SCORE ____________

Each day research brings new information and issues concerning the process of conceiving and bringing a new life into this world. Different media broadcast this information, and to some people this information brings new hope; to others, despair and worry. As a nurse, you need to be well informed and to try looking at these issues with an open and inquisitive mind. Friends, family, and patients will look to you for solutions to their concerns and problems.

Select an issue that interests you and collect resources. Compile newspaper and magazine articles, textbooks, or medical and professional journals that address the issue. Read each one, outline information, write a brief report on the issue, and present in class. Pages for your outline and report are included with this assignment sheet. Use at least three resources, one of which should be a professional journal.

To help you analyze the information, ask yourself these questions.

A. How did this issue come about?

B. Do authors agree about the issue? If not, how do their views differ?

C. How do you think this issue may affect the nursing profession?

ASSIGNMENT SHEET #1

D. What are your feelings concerning the issue?

OUTLINE OF INFORMATION

ASSIGNMENT SHEET #1

E. List your three resources below.

1. ____

2. ____

3. ____

ASSIGNMENT SHEET #1

REPORT

ASSIGNMENT SHEET #1

ASSIGNMENT SHEET #1

ASSIGNMENT SHEET #1

INTRODUCTION TO MATERNAL AND INFANT CARE
UNIT I

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

INTRODUCTION TO MATERNAL AND INFANT CARE
UNIT I

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with maternal and infant care to their correct definitions. Write the correct numbers in the blanks. Terms and definitions are continued on the next page.

______ a. Qualified, registered professional who has evidence of certification according to the requirements of the American College of Nurse-Midwives and who has the right to use the title

______ b. Process of giving birth to young; childbirth

______ c. Series of processes, especially the coordinated, periodic uterine contractions, whereby the fetus is expelled in parturition

______ d. Lay term for *abortion*

______ e. Product of conception from the moment of fertilization to the end of the eighth week after fertilization

______ f. Developing body in utero from the beginning of the ninth week after fertilization until birth

______ g. State of the woman from conception to childbirth; gestation

______ h. Branch of medicine concerning the care of women during pregnancy, labor, and puerperium

______ i. Large, double-bladed traction forceps used to assist in difficult or delayed labor

______ j. Delivery of the fetus through an abdominal incision

______ k. Febrile state caused by infection of the endometrium and septicemia following delivery; childbed fever

______ l. State of a woman in labor or of one who has just been delivered; the period from delivery to the time when the uterus has regained its normal size, usually about six weeks

1. Puerperal sepsis
2. Nurse-midwife
3. Labor
4. Parturition
5. Fetus
6. Embryo
7. Pregnancy
8. Puerperium
9. Obstetrics
10. Miscarriage
11. Cesarean section
12. Obstetric forceps

TEST

_____m. Pertaining to birth

_____n. Artificially induced or spontaneous expulsion of an embryo or fetus before it is viable

_____o. Expulsion or extraction of a fetus and its membranes; parturition

_____p. Time of expected delivery

_____q. Expulsion of the fetus after the twenty-eighth week and before term

_____r. Embedding of the embryo into, or on, the endometrium

_____s. Form of childbirth in which psychological, physiological, and emotional aspects are emphasized in order to educate the patient for labor and, when possible, to reduce or eliminate the use of drugs

_____t. Expected date of confinement

13. Natal
14. Delivery
15. Abortion
16. Premature delivery
17. Implantation
18. Term
19. Prepared childbirth
20. EDC

2. Match historical persons to their contributions to obstetrics. Write the correct numbers in the blanks.

_____a. Described the circulation of blood and physiology of pregnancy

_____b. Invented original obstetric forceps

_____c. First demonstrated the contagiousness of puerperal sepsis in Scotland, 1796

_____d. In 1843, wrote a paper about medical aseptic techniques useful in combating puerperal sepsis

_____e. In 1847, proved that puerperal sepsis was contagious and could be prevented by aseptic technique

_____f. Considered to be the "Father of general anesthesia"

1. Oliver Wendell Holmes
2. William Harvey
3. Ignaz Semmelweis
4. Peter Chamberlen
5. Alexander Gordon
6. William Thomas Green Morton

TEST

3. Describe current trends in maternal and infant care.

a. Changing family roles--

b. Changing nursing roles--

c. Changing delivery techniques--

d. New conception methods--

TEST

4. List information given in prepared childbirth classes.

a. ______________________________

____

b. ______________________________

____

c. ______________________________

____

d. ______________________________

____

e. ______________________________

____

5. Select from the following list advantages of prepared childbirth. Write an "X" in the blank before each correct answer.

_____a. Decreases chance that infant will have genetic anomalies

_____b. Decreases use of analgesia and anesthesia and possibilities of side effects in mother and infant

_____c. Promotes maternal-infant bonding

_____d. Enhances maternal and paternal relationship by allowing both parents to participate in birth process

_____e. Decreases need for staff in labor and delivery rooms

_____f. Ensures a reduction of time spent in hospital by mother and infant

_____g. Reduces fear and anxiety through knowledge and understanding

_____h. Reduces in infant number of complications seen with other types of labor and delivery methods

_____i. Decreases time physician needs to spend with patient

_____j. Develops tone in muscles used in childbirth process

(NOTE: Test question 6 lists the assignment sheet. It is an important part of this test. If it has not been completed, check with your instructor.)

6. Compile a report on current issues concerning pregnancy and infant care.

INTRODUCTION TO MATERNAL AND INFANT CARE
UNIT I

ANSWERS TO TEST

1.	a.	2	h.	9	o.	14
	b.	4	i.	12	p.	18
	c.	3	j.	11	q.	16
	d.	10	k.	1	r.	17
	e.	6	l.	8	s.	19
	f.	5	m.	13	t.	20
	g.	7	n.	15		
2.	a.	2	c.	5	e.	3
	b.	4	d.	1	f.	6

3. Description should include the following

   a. Changing family roles

      1) Emphasis on family-centered maternity care

      2) More holistic approach to prenatal care, labor and delivery, and the puerperium stages of pregnancy

   b. Changing nursing roles

      1) An increase in nurse-midwives, specially prepared nurses who supervise prenatal care, delivery, and postnatal care

      2) More of a team approach as various levels of professionals provide maternity care

   c. Changing delivery techniques

      1) Movement back to home childbirth or to birthing centers with midwives or even fathers or support persons delivering the infant

      2) Perfection of various types of birthing techniques

      3) Movement to bring back a modern version of childbirth stool

ANSWERS TO TEST

d. New conception methods

   1) Many couples electing to use artificial insemination, using the father's sperm or donor sperm

   2) Surrogate mothers conceiving and delivering infants for women who are unable to conceive and/or carry a full-term pregnancy

   3) Embryo conceived in test tubes, using mother's ovum and father's sperm and later implanted into the mother; this technique is used for women who are unable to conceive but are able to carry the pregnancy

4. a. Education about pregnancy and childbirth to dispel fears and apprehensions

   b. Methods of excercising to strengthen and increase flexibility of muscles used in labor

   c. Methods of completely relaxing muscles

   d. Instruction concerning breathing and proper use of muscles as conditioning for labor and delivery

   e. Instructions to father-to-be so that he may help throughout pregnancy and labor

5. b, d, g, h, j

6. Evaluated to the satisfaction of the instructor

PRENATAL CARE
UNIT II

UNIT OBJECTIVE

After completing this unit, the student should be able to provide prenatal care for the pregnant patient. This knowledge will be shown by completing the assignment sheet and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with prenatal care to their correct definitions.
2. Distinguish among presumptive, probable, and positive signs and symptoms of pregnancy.
3. Calculate estimated date of confinement or estimated date of delivery, using Naegele's rule.
4. Describe effects of chromosomes in heredity, sex determination, and anomalies.
5. Describe physiological changes that occur during pregnancy.
6. Describe the placenta and umbilical cord.
7. Select from a list functions of the placenta.
8. Describe stages of prenatal growth.
9. Show pathway of fetal circulation.
10. Describe care of the patient during pregnancy.
11. Match structures of female reproductive system to their functions.
12. Identify parts of the female pelvis.
13. Describe pelvic measurements.
14. State facts related to the female reproductive system during the menstrual cycle when pregnancy occurs.
15. Match to their correct actions anterior pituitary gland hormones that affect reproduction.
16. Describe steps that take place in conception.
17. Describe minor discomforts during pregnancy and their causes and treatments.

OBJECTIVE SHEET

18. Describe causes and treatments of some complications of pregnancy.

19. State diseases or conditions that affect mother and/or fetus, and effects or treatment.

20. Prepare care plan for a pregnant patient.

PRENATAL CARE
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities

A. Order materials planned to supplement unit.

1. Films

a. *Pregnancy and Birth,* Color, 12 minutes, Films, Inc., 1969. Available from Films, Inc., 733 Green Bay Road, Wilmette, Illinois 60091.

b. *Nine Months in Motion,* Color, 19 minutes, Perennial Education, Inc. Available from Perennial Education, Inc., 477 Roger Williams, P.O. Box 855 Ravinia, Highland Park, Illinois 60035.

c. *Have a Healthy Baby: Pregnancy,* Color, 22 minutes, Churchill Films, 1978. Available from Churchill Films, 622 North Robertson Blvd., Los Angeles, California 90069.

d. *Story of Eric,* Color 33 minutes, Centre Films, 1971. Available from Centre Films Inc., 1103 N. El Centre Avenue, Hollywood, California 90038.

e. *Teenage Father.* Color, 28 minutes. Available from Oklahoma State Department of Health, N.E. 10th and Stonewall, Oklahoma City, Oklahoma 73105.

(NOTE: These films are available on a free-loan basis to Oklahoma teachers only. These teachers may order from the Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1500 West Seventh Avenue, Stillwater, Oklahoma 74074. Out-of-state teachers must order from the addresses above.)

f. *Not Me Alone.* Color, 30 minutes, Oklahoma State Department of Health, 1973. Available from Oklahoma State Department of Health, N.E. 10th and Stonewall, Oklahoma City, Oklahoma 73105.

g. *Alcohol, Crisis for Unborn.* RHR Filmedia Inc. Available from RHR Filmedia Inc., New York, New York 10036.

2. Filmstrips

a. *Human Development: First 2 1/2 Years,* "Program 1: Pregnancy, Birth and the Newborn." Concept Media, P.O. Box 19542, Irvine, California 92714.

SUGGESTED ACTIVITIES

(NOTE: The following filmstrips are available from Trainex Corporation, P.O. Box 116, Garden Grove, California 92642.)

- b. *Fetal Development.*
- c. *First Trimester: Nine Months to Motherhood.*
- d. *Second Trimester: Six Months to Motherhood.*
- e. *Third Trimester: Three Months to Motherhood.*
- f. *Complications of Pregnancy.*

3. Booklets
   - a. *Pregnancy in Anatomical Illustrations*, rev. 1981. Available from Carnation Company, P.O. Box 200, Department A, Pico River, California 90065.
   - b. *Life Before Birth.* Color photographs of stages of human reproduction from fertilization to just before birth. Reprinted from *Life*. Available through Oklahoma State Department of Vocational and Technical Education/ Curriculum and Instructional Materials Center, 1500 West Seventh Avenue, Stillwater, Oklahoma 74074.
4. Models
   - a. Ligamented female pelvis
   - b. Obstetric model

   (NOTE: Models available from Trainex Corporation. Toll-free number 800-854-2485.)
5. Charts--Ross Laboratories, Educational Services Department 441, 625 Cleveland Avenue, Columbus, Ohio 43216.

   (NOTE: Order catalog of available charts.)

- B. Make transparencies.
- C. Provide students with objective sheet.
- D. Provide students with information and assignment sheets.
- E. Discuss unit and specific objectives.
- F. Discuss information and assignment sheets.
- G. Develop appropriate learning activities for special needs students.
- H. Review anatomy and physiology, using models and charts.

SUGGESTED ACTIVITIES

- I. Use models or fetal specimens from laboratory to show size of actual fetus.
- J. Demonstrate fetal circulation on model or chart.
- K. Demonstrate use of pelvimeter or caliper for pelvimetry, using a model or skeleton.
- L. Give test.
- M. Reteach if necessary.

II. Instructional materials

- A. Objective sheet
- B. Suggested activities
- C. Information sheet
- D. Transparency masters
  1. TM #1--Placenta Previa Prior to Onset of Labor
  2. TM #2--Placenta Abruptio
  3. TM #3--Division and Implantation
  4. TM #4--First Three Months of Development
  5. TM #5--Fetus: Fifth and Sixth Months
  6. TM #6--Fetus: Full Term
  7. TM #7--Maternal Sensitization to Rh Factor
- E. Assignment Sheet #1--Prepare Care Plan for a Pregnant Patient
- F. Answers to assignment sheet
- G. Test
- H. Answers to test

III. Unit references

- A. Anderson, Barbara, and Pamela Shapiro. *Obstetrics for the Nurse.* Albany, New York: Delmar Publishers, 1979.
- B. Jensen, Margaret Duncan, Ralph C. Benson, and Irene Bobak. *Maternity Care: The Nurse and the Family.* St. Louis: The C.V. Mosby Company, 1977.

PRENATAL CARE
UNIT II

INFORMATION SHEET

I. Terms and definitions

A. Amniocentesis--Transabdominal puncture of amniotic sac to obtain a sample of amniotic fluid

(NOTE: Amniocentesis may be used to assess fetal health and maturity.)

B. Amnion--Innermost of fetal membranes forming a fluid-filled sac for protection of embryo

C. Amniotic fluid--Transparent, almost colorless fluid contained in amnion; composed of albumin, urea, creatinine, water, and various salts

D. Anomaly--Any deviation from the usual or normal

E. Blastocyst--Stage in development of mammalian embryo

F. Bloody show--Blood-tinged mucus discharged from vagina before or during labor

G. Braxton Hicks contractions--Mild, intermittent, painless uterine contractions that occur during pregnancy

H. Chadwick's sign--Dark blue discoloration of vaginal mucous membrane

I. Chloasma gravidarum--Brownish pigmentation of face during pregnancy

J. Chorion--Outermost fetal membrane that surrounds the amnion

K. Conception--Fertilization of ovum by spermatozoon

L. Copulation--Act of sexual union; coitus; sexual intercourse

M. Dilatation--Expansion of an orifice or opening

N. Ectopic pregnancy--Implantation of fertilized ovum outside uterine cavity

(NOTE: Ectopic implantation most frequently occurs in the fallopian tube, and surgical removal of the tube is needed.)

O. Effacement--Gradual flattening or thinning of cervix during labor

P. Embryo--Product of conception from moment of fertilization to end of eighth week after fertilization

Q. Erection--Enlarged state of erectile tissue when engorged with blood, as of penis or clitoris

INFORMATION SHEET

R. Fertilization--Union of ovum and sperm

S. Fetus--Developing body in utero from beginning of ninth week after fertilization until birth

T. Gestation--Period of intrauterine fetal development from conception through birth

U. Goodell's sign--Softening of cervix occurring about time of second missed menstrual period

V. Gravida (Gr)--Woman who is pregnant; number of pregnancies of any duration

(NOTE: Gravida II indicates a woman's second pregnancy.)

W. Hegar's sign--Softening of lower segment of uterus during second and third months of pregnancy

X. Hemorrhoid--Mass of dilated, tortuous veins in anorectum; may be external or internal

Y. Hydatid mole--Transformation of all or part of placenta into grapelike cysts with rapid growth of the uterus and with hemorrhage

Z. Hyperemesis gravidarum--Prolonged and excessive vomiting in pregnancy

AA. Incompetent cervical os--Mechanical defect in cervix causing dilation and effacement in early pregnancy

BB. Lightening--Descent of fetal head into pelvic inlet

CC. Linea nigra--Dark pigmented line often present in pregnant women and extending from pubes upward in midline

DD. Lunar month--Four weeks; twenty-eight days

EE. Morning sickness--Nausea and vomiting usually in early part of day in first months of pregnancy

FF. Multigravida--Woman who has been pregnant two or more times

GG. Multipara--Woman who has borne more than one viable child

HH. Ovulation--Maturation and discharge of ovum

II. Para--Refers to previous pregnancies that have reached period of viability

(NOTE: Gravida III, para I indicates a third pregnancy and the birth of one viable infant.)

JJ. Pelvimeter--Curved, hinged instrument with adjustable arms used for measuring pelvis

INFORMATION SHEET

KK. Pelvimetry--Measurement of dimensions of pelvis

LL. Placenta abruptio--Premature separation of placenta before labor or delivery (Transparency #2)

MM. Placenta previa--Placenta that is implanted in lower portion of uterus (Transparency #1)

(NOTE: There are three types of placenta previa: total, with the cervical os completely covered by the placenta; partial, with the cervical os partially covered; and low implantation, with the placenta edge at the opening of the os but not covering it.)

NN. Polyhydramnios--Excessive volume of amniotic fluid

OO. Preeclampsia--Condition seen in pregnancy or early puerperium characterized by increasing hypertension, albuminuria, and generalized edema

PP. Prenatal--Before delivery; antepartum

QQ. Primigravida--Woman during her first pregnancy

RR. Primipara--Woman who is having or has had one viable child

SS. Quickening--First fetal movement felt by mother, which occurs between sixteenth and twentieth weeks of pregnancy

TT. Striae--White, shiny, slightly depressed lines on abdomen, breasts, or thighs following prolonged stretching of skin; stretch marks

UU. Toxemia--Pathological condition sometimes occurring in last half of pregnancy with symptoms of hypertension, edema, proteinuria, sodium retention, and convulsions or coma

VV. Trimester--Stage or period of three months of a pregnancy

WW. Varicosity--Vein which has become abnormally dilated and tortuous because of interference with venous drainage or weakness of vein walls

(NOTE: Varicose veins are also called *varices*, singular *varix*.)

XX. Viable--Capable of living; capable of growing and developing

II. Presumptive, probable, and positive signs and symptoms of pregnancy

A. Presumptive

(NOTE: The pregnancy may be assumed, but these symptoms may indicate other conditions.)

1. Amenorrhea

INFORMATION SHEET

2. Morning sickness
3. Frequent urination
4. Changes in breasts

B. Probable

(NOTE: These signs and symptoms are more definitive than the presumptive symptoms but are not absolute.)

1. Enlargement of abdomen
2. Changes in uterus and cervix

   EXAMPLES: Hegar's, Goodell's, and Chadwick's signs

3. Positive pregnancy test

   (NOTE: These tests are basically based on the presence of the gonadotrophin hormone.)

   EXAMPLES: Friedman, Gravindex, Pregnosticon tests

   (NOTE: Over-the-counter pregnancy tests are available. Accurate results depend on the ability to follow manufacturer's instructions.)

C. Positive

(NOTE: These signs or symptoms are indisputable evidence of pregnancy.)

1. Fetal heart sounds
2. Fetal movements felt by an examiner
3. Ultrasonographic detection of fetus

   (NOTE: Ultrasonography scans mother's abdomen with high-frequency sound waves to follow fetal growth and development.)

III. Naegele's rule for determining estimated date of confinement (EDC) or estimated date of delivery (EDD)--Count back three calendar months from the first day of the last menstrual period and add seven days

EXAMPLE: Last menstrual period November 18: EDC or EDD would be August 25

IV. Effects of chromosomes in heredity, sex determination, and anomalies

A. Heredity--Each mature ovum and sperm has twenty-three chromosomes composed of an unknown number of genes whose units transmit hereditary characteristics

EXAMPLE: Eye color

INFORMATION SHEET

B. Sex determination--Female chromosomes carry two type X sex chromosomes; male sex chromosomes carry both X and Y; sex is determined by male chromosomes

(NOTE: If ovum unites with a sperm cell carrying an X chromosome, the baby will be female; if ovum unites with a sperm cell carrying a Y chromosome, the baby will be male.)

C. Anomalies

(NOTE: Some genetic disorders cause little difficulty while others may result in severe handicaps.)

EXAMPLE: Down's syndrome (mongolism)

1. Chromosomes may divide with too much or too little material transmitted
2. Chromosomes break, and parts of two chromosomes unite to form crossover of material
3. Transmission of too many or too few chromosomes or of incomplete chromosomes, results in congenital malformation

V. Physiological changes that occur during pregnancy

(NOTE: During pregnancy there is an average weight gain of twenty pounds. The growth of the fetus, placenta, amniotic fluid, and uterus accounts for thirteen to fourteen pounds. The remaining weight gain is from the increase of blood and extracellular fluid.)

A. Cardiovascular and respiratory systems

1. Blood volume increases thirty to forty percent to supply fetus

   (NOTE: The increase of blood volume produces evidence of false anemia.)

2. Blood pressure remains about same as before pregnancy
3. Heart and lungs are gradually displaced upward by growing fetus
4. Pulse and respiratory rate increase
5. Blood becomes richer in protein

B. Digestive system

1. Stomach and intestines are displaced upward
2. Tone and motility of tract, and secretion of stomach acid and pepsin, decrease; digestive process becomes slower, and constipation occurs frequently

INFORMATION SHEET

C. Endocrine system

1. Glands increase in size and activity
2. Metabolism rate gradually increases as much as twenty-five percent to provide for growing fetus and to provide necessary energy to carry increasing load

D. Breasts

1. Blood vessels and secreting glands enlarge, producing a sensation of fullness; breasts may have a tingling sensation
2. Breasts, nipples, and areola enlarge and become more pigmented

E. Musculoskeletal system

1. Symphysis pubis loosens and becomes more pliable as cartilage softens
2. Lordosis increases due to weight increase
3. Hip joints loosen and separate, resulting in wider pelvic girdle
4. Pendulous abdomen may require additional support

F. Integumentary system

1. Striae may appear on breasts, abdomen, thighs, and buttocks
2. Pigmentation may increase on face or abdomen

   (NOTE: Pigmentation on face is known as *chloasma gravidarum*, and on the abdomen as *linea nigra*.)

G. Urinary system

1. Kidneys must increase output

   (NOTE: Adequate fluid intake is essential to maintain kidney function and bladder tone.)

2. Frequency of urination occurs in first and third trimesters due to increased pressure on bladder

H. Reproductive system

1. Uterus increases greatly in size from solid organ to thin-walled muscular sac

   (NOTE: The additional weight of uterus and fetus will cause strain on muscles and ligaments of back.)

INFORMATION SHEET

2. Cervix softens early in pregnancy

3. Vaginal mucosa thickens; vaginal muscles hypertrophy

4. Perineal skin and muscles hypertrophy; connective tissue loosens

VI. Placenta and umbilical cord

A. Placenta

1. Dark red, circular organ about eight inches in diameter and one to one-and-one-half inches thick

2. Weight is approximately one to two pounds

3. Fetal side is smooth and glistening, with blood vessels clearly visible; maternal side is irregularly rough and composed of many small lobes called *cotyledons*

4. Fingerlike projections from chorion penetrate uterine wall to provide nourishment for fertilized ovum

5. Full development is reached by twelfth week of pregnancy

B. Umbilical cord

1. Composed of two arteries and one vein intertwined and covered by a soft jellylike substance called *Wharton's jelly*

2. Attaches to center of placenta and enters fetus at approximate center of abdominal wall

VII. Functions of the placenta

A. Provides for nutrition, excretion, and respiration of fetus through contact with uterine blood supply

B. Secretes progesterone to inhibit uterine contractions and aid in maintaining pregnancy, estrogen to aid in lactation and growth and development of fetus, and chorionic gonadotrophin to maintain the corpus luteum

C. Acts as protective barrier to prevent some drugs and harmful organisms from entering fetal circulation

VIII. Stages of prenatal growth

A. Ovum (Transparency #3)

1. Mature ovum and sperm, each with twenty-three chromosomes, unite to produce a fertilized ovum with forty-six chromosomes

(NOTE: Ovum and sperm may unite up to thirty hours after intercourse.)

INFORMATION SHEET

2. Zygote begins to divide rapidly, forming two cells, then four cells, eight cells, and so on

   (NOTE: This process is begun at thirty hours and continued to the third day.)

3. Cells continue to divide to form a hollow ball (blastocyst) with an inner and outer layer of cells

   (NOTE: This process occurs about the fourth day.)

4. Outer layer of cells sends out projections which will develop into placenta and become implanted in uterine wall

   (NOTE: This process takes place from the fifth to the seventh day.)

B. Embryo (to eighth week)

   1. Cell division and growth continue (Transparency #4)
   2. Inner layer of cells divides into three distinct layers that begin the formation of specific body structures
   3. Embryo is about one-quarter of an inch long
   4. All organs are formed

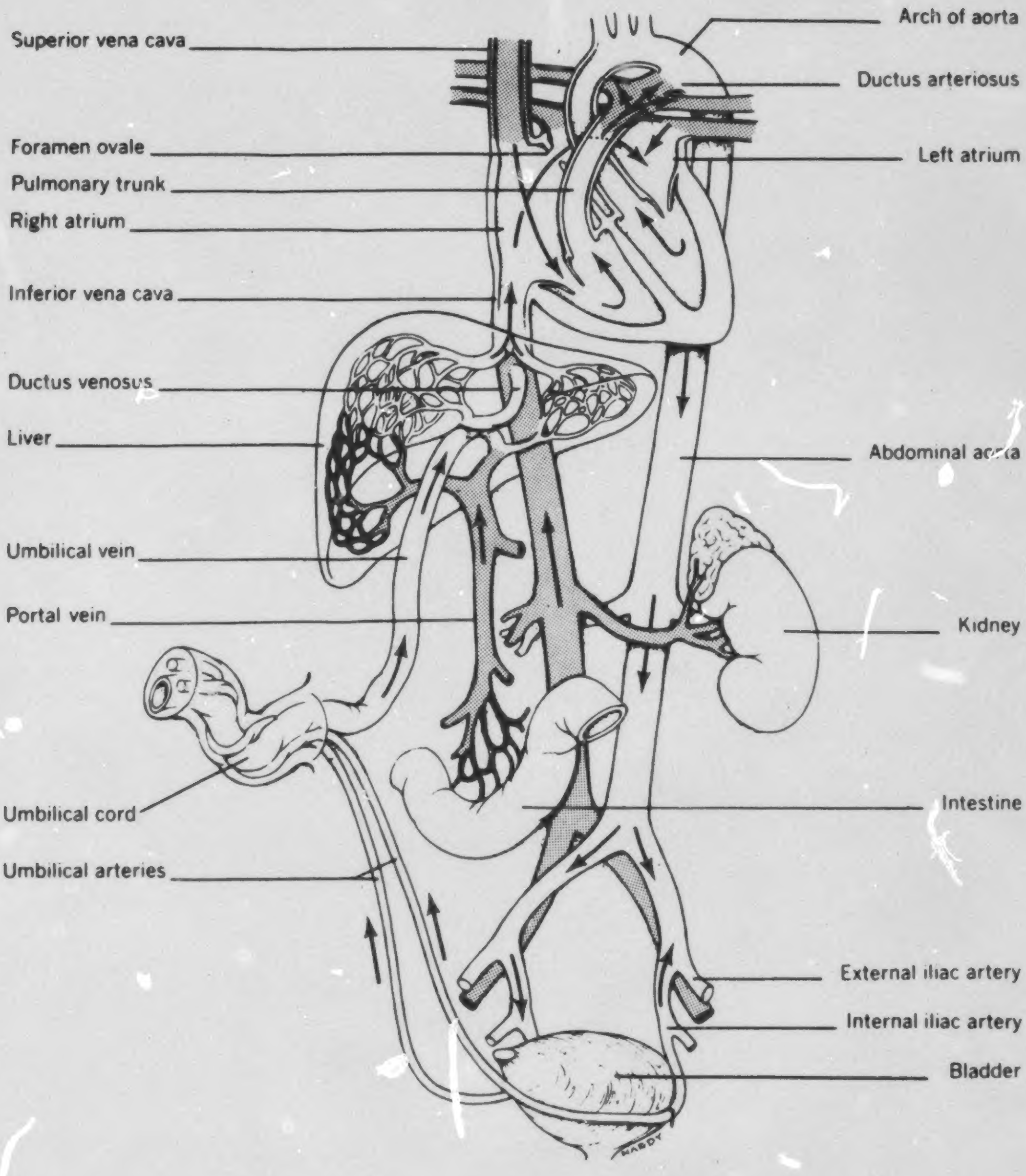
C. Fetus (ninth week to birth) (Transparencies #5 and #6)

   1. Head becomes prominent with recognizable features; is about one-inch long by second lunar month
   2. Bones, baby teeth, fingers, and toes begin to form; sex can be determined by third lunar month
   3. Fetus grows to six inches in length and four ounces in weight by fourth lunar month
   4. Fetal heart becomes audible and mother feels movement by fifth lunar month
   5. Resembles miniature baby by sixth lunar month; considered viable, but usually will not survive if delivered
   6. Weighs two-and-one-half pounds by end of seventh lunar month; good chance for survival
   7. Body begins to fill out with subcutaneous layer of fat; fetus weighs about six pounds by eighth lunar month; chance of survival is very good
   8. Length of term varies from 240 to 300 days; usual length is 280 days, or 10 lunar months or 40 weeks

INFORMATION SHEET

IX. Pathway of fetal circulation (Figure 1)

FIGURE 1


Superior vena cava
Foramen ovale
Pulmonary trunk
Right atrium
Inferior vena cava
Ductus venosus
Liver
Umbilical vein
Portal vein
Umbilical cord
Umbilical arteries
Arch of aorta
Ductus arteriosus
Left atrium
Abdominal aorta
Kidney
Intestine
External iliac artery
Internal iliac artery
Bladder
HARDY

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INFORMATION SHEET

X. Care of the patient during pregnancy (Assignment Sheet #1)

A. Medical care

1. Patient should obtain an initial physical examination

   (NOTE: This examination should include history and general physical; pelvic evaluation including measurements, size, and shape; vaginal examination with Pap smear and check for gonorrhea; breast examination; and laboratory tests including urinalysis, VD tests, complete blood count, blood type, and Rh factor.)

2. Patient should have early and regular physical checkups with urinalysis, weight determination, blood pressure reading, and breast examination; during last trimester, vaginal examination is done to determine condition of cervix and position and presentation of fetus

   (NOTE: During early pregnancy, checkups are done monthly. Beginning in the eighth month, checkups are increased to two per month, and during the ninth month they are usually done weekly.)

B. Nutrition

1. Proper diet based on basic four food groups is encouraged

   (NOTE: Special attention should be given to teenage mothers who may have inadequate nutrition.)

2. Increased caloric intake of approximately 200 calories per day is suggested, with emphasis on increased protein rather than fats or carbohydrates

3. Vitamin/mineral supplements as prescribed and an increased intake of liquids is recommended

C. Rest and exercise

1. Usual activities are permitted, but with more frequent periods for resting because of increasing metabolism

2. Exercises to preserve muscle strength and tone, and special exercises to aid in labor and delivery are taught in prepared childbirth classes

   (NOTE: Patient should avoid strenuous activities and heavy lifting in the last trimester, and any exercise attempted should have the physician's approval.)

3. Body alignment changes as center of gravity changes, and special exercises should be done to assist in pelvic realignment

4. Prolonged sitting increases pooling of blood in the legs and should be avoided

INFORMATION SHEET

D. Cleanliness

1. Tub baths are usually permitted until the membranes rupture; however, caution should be taken in later months of pregnancy due to size and problems with balance

   (NOTE: Increased activity of skin glands and increased vaginal discharge may necessitate that the patient bathe more frequently.)

2. Vaginal douching is prohibited

3. Striae may be massaged with skin cream or lotion

E. Breasts

1. Well-fitting bras to support breasts are recommended as the weight and size of breasts increase

2. Patient should be instructed to clean nipples daily and to apply lanolin or cream as needed to prevent irritation or cracking

   (NOTE: Drying nipples with a rough towel in the last trimester is often suggested to help toughen nipples in preparation for breast-feeding.)

F. Bowel habits

(NOTE: Reduced activity and expanding uterus increase the tendency to constipation.)

1. Constipation should be treated with adequate fluid intake and increased intake of fruits and vegetables

2. Patient should use laxatives only as prescribed

G. Clothing

1. Patient should be advised not to wear clothes that restrict or interfere with circulation

2. Patient should wear low-heeled shoes to assist in maintaining balance

3. Abdominal support may be needed in latter part of pregnancy

H. Teeth--Patient is advised to seek early and regular dental checkups with necessary follow-up treatment

(NOTE: Maintenance of good dental care is important because of increased bacterial growth in mouth during pregnancy.)

INFORMATION SHEET

XI. Structures of female reproductive system and their functions

A. Pelvis--Contains and protects reproductive organs, bladder, and rectum; forms part of birth canal

B. Ovaries--Develop and expel a mature ovum each month; produce hormones estrogen and progesterone

C. Fallopian tubes or oviducts--Provide site for union of sperm and ovum; propel ovum into uterus by peristaltic and ciliary actions

D. Uterus--Receives fertilized ovum; provides housing and nourishment for developing fetus

E. Bartholin's glands--Secrete mucus

F. Mons veneris--Protects symphysis pubis

G. Labia majora and minora--Protect inner vulva and clitoris

H. Clitoris--Organ of sexual excitation

I. Vestibule--Contains openings of vagina, urethra, and Bartholin's glands

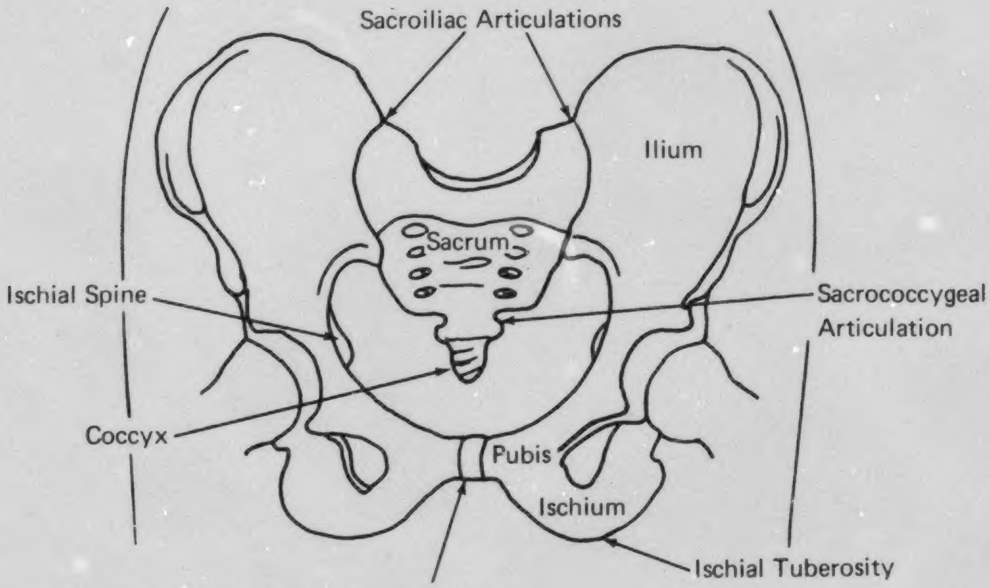
J. Vagina--Organ of copulation; forms birth canal

K. Perineum--Provides muscular support of pelvic organs

L. Breasts--Secrete milk

XII. Parts of the female pelvis (Figure 2)

FIGURE 2


Sacroiliac Articulations
Ilium
Sacrum
Ischial Spine
Sacrococcygeal Articulation
Coccyx
Pubis
Ischium
Ischial Tuberosity

INFORMATION SHEET

XIII. Pelvic measurements (See Figures 3 and 4 on following page)

(NOTE: These measurements are usually taken in the first examination of the pregnant patient to determine if the pelvis is large enough for delivery of infant.)

- A. Anteroposterior or true conjugate (Figures 3 and 4)
  1. Diameter from sacrum to upper margin of symphysis pubis
  2. Usually measures 11 cm or more
- B. Transverse diameter of inlet (Figure 3)
  1. Measurement across widest portion of pelvic inlet
  2. Usually measures 13.5 cm
- C. Oblique diameters (Figure 3)
  1. Measurement from point on sacroiliac articulation to iliopubic eminence on opposite side of pelvis
  2. Usually measures 12.5 cm or more
- D. Transverse diameter of outlet (Figure 4)
  1. Distance between the two ischial tuberosities
  2. Usually measures 8 cm or more

INFORMATION SHEET

FIGURE 3

Pelvimetry: Inlet

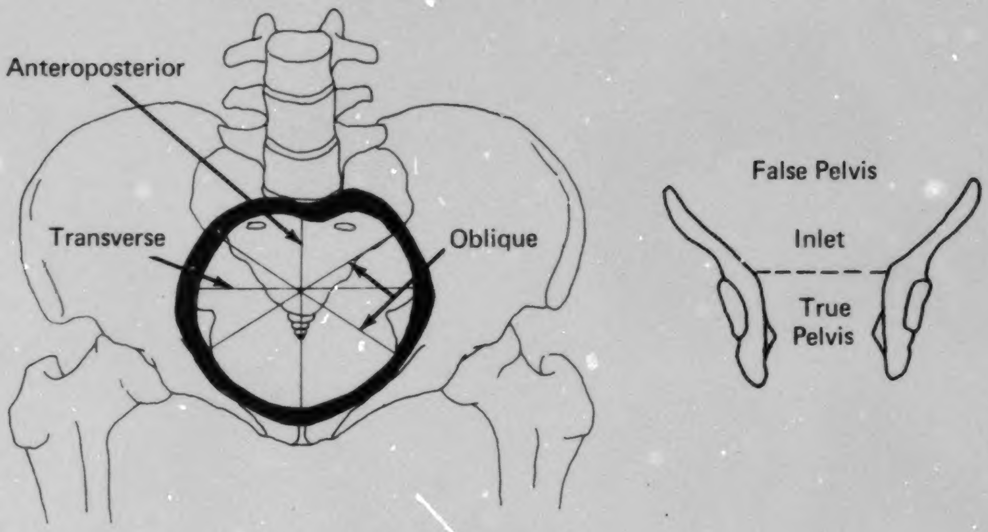
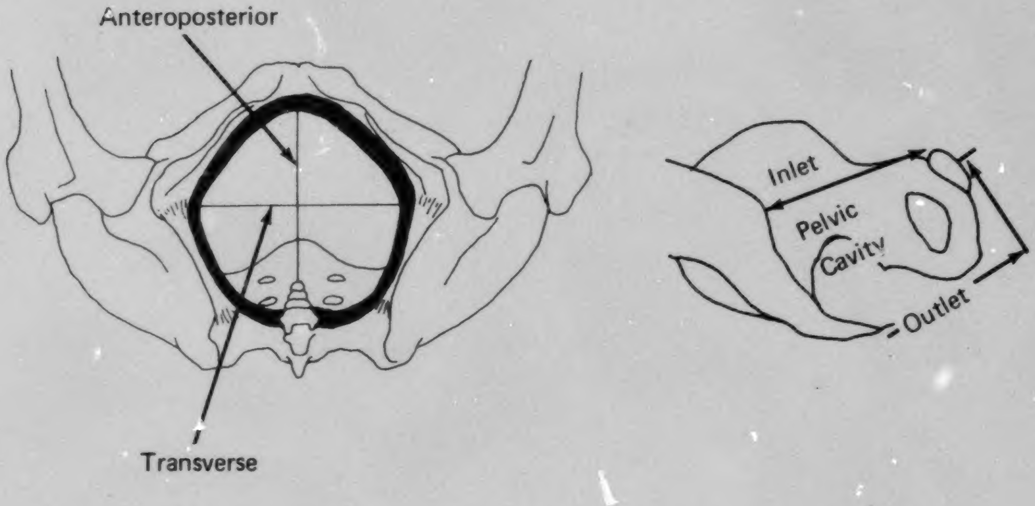

Anteroposterior
Transverse
Oblique
False Pelvis
Inlet
True Pelvis

FIGURE 4

Pelvimetry: Outlet


Anteroposterior
Transverse
Inlet
Pelvic Cavity
Outlet

INFORMATION SHEET

XIV. Female reproductive system during the menstrual cycle when pregnancy occurs

THE MENSTRUAL CYCLE AND PREGNANCY

Uterus	Days of Cycle	Ovaries
Menses	1-5	Follicle matures
Endometrium thickens	6-16	
	10-14	Ovulation occurs; follicle changes to corpus luteum
Fertile period; endometrium continues to thicken	14-16	Conception occurs; zygote floats through tube
Blastocyst floats freely in uterus	17-21	Corpus luteum enlarges in response to chorionic gonadotrophin produced by placenta, continues production of progesterone and estrogen for approximately three months
Blastocyst implants; outer layer begins forming placenta	21-22	
Placenta fully formed	12th week	Placenta assumes production of gonadotrophin, progesterone, and other hormones throughout pregnancy

INFORMATION SHEET

XV. Actions of anterior pituitary gland hormones that affect reproduction

A. Follicle-stimulating hormone (FSH)--Induces maturation of ovarian follicles and production of estrogen

B. Luteinizing hormone (LH)--Brings about ovulation and stimulates progesterone production

C. Luteotropic hormone (LTH)--Stimulates secretion of milk by breasts

XVI. Steps that take place in conception

A. Fertilization

(NOTE: Sperm is viable for forty-eight hours after ejaculation; ovum is viable twelve to twenty-four hours after ovulation. The fertile period is two days before ovulation until twenty-four hours after ovulation.)

1. Usually occurs in upper portion of fallopian tube

2. May occur in abdominal cavity before ovum enters fallopian tube

(NOTE: The sperm secretes an enzyme which dissolves the protective covering of the ovum and permits penetration of the sperm. After one sperm enters the ovum, the protective covering becomes impermeable. The fertilized ovum is called a *zygote.*)

B. Implantation of zygote

1. Fertilized ovum begins cell division and passes through fallopian tube in three days

2. After floating freely in uterine cavity for three or four more days, it begins implantation, usually in upper posterior wall

3. Outer layer of cells begins penetrating uterine wall, and by end of approximately twelve weeks placenta is fully formed

C. After implantation

1. Endometrium becomes thick and vascular

2. Nutrients and vitamins to nourish fetus are stored in endometrium

INFORMATION SHEET

XVII. Minor discomforts during pregnancy and their causes and treatments

MINOR DISCOMFORT	CAUSE	TREATMENT
Morning sickness, heartburn, or indigestion	Decrease in gastric secretions and motility, physiological changes due to pregnancy, emotional reactions	Frequent small meals, dry food eaten before rising, medications such as antacids **(CAUTION: Patient should be advised that any medication should be discussed with physician before taking.)**
Gingivitis	Deficiency of vitamin C, ascorbic acid	Increased intake of vitamin C; use of astringent mouthwash
Constipation	Diminished gastric motility, pressure of uterus on intestines	Adequate fluid intake; increased intake of fruit, vegetables, and other foods containing cellulose; physical activity such as walking; mild laxative or enema, *but only as prescribed*
Vaginal discharge	Natural increase of secretions of vaginal and cervical glands, infections such as Monilia or Trichomonas, cervical erosion (NOTE: Tendency toward increased incidence of infection is due to the higher estrogen level and change in the vaginal pH.)	More frequent bathing with particular attention to vaginal and perineal area, treatment of infection as prescribed
Shortness of breath	Pressure of uterus on the diaphragm or descending aorta, supine position during latter half of pregnancy	Change of position from supine to Sims'; elevation of upper part of body when sleeping or resting (NOTE: Relief is obtained when lightening occurs.)

INFORMATION SHEET

MINOR DISCOMFORT	CAUSE	TREATMENT
Leg cramps	Excess of phosphorus in body, pressure of uterus on nerves and blood vessels supplying lower extremities, ingestion of too much or too little milk, fatigue	Calcium lactate, calcium gluconate, or vitamin B supplements as prescribed; pressure on toes to force them upward and to straighten knee
Dependent edema	Decreased circulatory efficiency in feet and legs in advanced pregnancy, increased pressures on groin and lower body	Frequent change of position, elevation of legs when possible
Physiologic edema	Increased fluid in circulatory system, toxemia	Limitation of salt intake, notification of physician
Backache	Change of posture and balance, weight of pregnancy, remaining in one position too long, poor body mechanics	Change of position or activity, exercise, support with girdle
Varicosities in legs, groin, and/or vulva	Increased abdominal pressure, prolonged standing, tight clothing, familial tendency	Elimination of tight clothing, frequent change of position, elevation of legs periodically, application of support hose before getting out of bed, prevention of constipation
Hemorrhoids	Constipation, increased pressure of uterus	Regular bowel habits, sitz baths, application of analgesic ointments or suppositories if prescribed
Striae	Stretching and rupturing of internal tissues	Massage of affected skin with lotion

INFORMATION SHEET

XVIII. Causes and treatments of some complications of pregnancy

A. Hemorrhage

1. Causes

   a. Early in pregnancy, may be caused by abortion, ectopic pregnancy, or hydatid mole

   b. Late in pregnancy, may be caused by placenta previa or placenta abruptio

2. Treatment and nursing responsibilities

   a. Observe vital signs

   b. Observe amount and character of bleeding

   c. Treat hemorrhage and shock as prescribed

   d. Save any expelled tissue for examination

   e. Observe aseptic technique to prevent infection

   f. Provide emotional support

B. Hyperemesis gravidarum

1. Causes

   (NOTE: The exact cause is unknown, but condition may be due to the following factors.)

   a. Hormonal changes

   b. Maladjustment of maternal metabolism

   c. Change in gastric motility

   d. Toxicity

   e. Anxiety and/or emotional problems

2. Treatment and nursing responsibilities

   a. Adequate care of morning sickness may prevent condition

   b. When hospitalization is required, treatment may include bed rest, IV therapy, medication to relieve symptoms, accurate intake and output, and emotional support

INFORMATION SHEET

C. Preeclampsia and eclampsia (toxemias of pregnancy)

(NOTE: Because so many theories have been proposed to explain etiology of toxemia, it has been called the "disease of theories.")

1. Causes

   (NOTE: The exact cause is unknown, but the following factors may predispose patients to toxic states.)

   a. Poor nutrition

   b. Inadequate protein intake

   c. Excessive weight gain

   d. Hypertension

   e. Diabetes

   f. History of toxemia in patient or family

   g. Impaired renal function

2. Treatment and nursing responsibilities

   (NOTE: Some of these treatments, if done early, could prevent eclampsia.)

   a. Early and continued prenatal care with observation for early symptoms

      (NOTE: Symptoms may include a significant rise in blood pressure, weight gain of more than three-pounds per week during third trimester, slight generalized edema, and proteinuria of 0.3 gm/l.)

   b. Limited weight gain with a restricted sodium intake; administration of diuretics

   c. Increased rest and quiet

   d. Medication as needed to lower blood pressure and hyperexcitability

      EXAMPLE: Diuretics, sedatives, magnesium sulfate

   e. Increased fluid intake; restricted food intake as indicated

   f. Protection in the event of convulsions; sedatives if needed

INFORMATION SHEET

g. Check deep tendon reflexes as labor begins

(NOTE: Severe preeclampsia symptoms may occur including severe headache, visual problems, epigastric pain or nausea, vomiting, and convulsion.)

h. Close observation for further complications until after delivery; termination of pregnancy if condition persists

(NOTE Eclampsia may occur up to seventy-two hours after delivery.)

D. Incompetent cervical os

1. Cause--Unknown but may be due to trauma

2. Treatment--Shirodkar operation or purse-string suture

(NOTE: A running-stitch suture is placed around the cervix and pulled taut to close the cervial os. Delivery may be through the vagina or by cesarean section. Before vaginal delivery, the suture must be severed.)

E. Blood incompatibilities

1. Rh factor (Transparency #7)

a. Causes

1) Rh-negative mother conceives baby with Rh-positive father

2) Rh-positive gene is dominant

3) Sensitization of mother to Rh factor may occur during labor and delivery of first baby or may result from receiving a transfusion with Rh-positive blood

4) After sensitization, mother begins producing antibodies

5) During subsequent pregnancies, antibodies from mother cross placental barrier and cause destruction of red blood cells in fetus

b. Treatment

1) Development of antibodies can be prevented by administration of anti-Rh globulin within seventy-two hours following delivery

2) Amniocentesis may be done to determine if sensitization has occurred; intrauterine fetal transfusion may be performed if indicated

INFORMATION SHEET

2. ABO incompatibility

   a. Causes

      1) Mother with type O blood conceives baby with a father with type A, B, or AB blood

      2) Blood cells of fetus hemolyze due to maternal antibodies, but reaction is usually less severe than Rh incompatibility

      3) Condition can occur in firstborn but does not increase in severity in subsequent pregnancies

   b. Treatment--No treatment of mother is needed

INFORMATION SHEET

XIX. Diseases or conditions that affect the mother and/or the fetus and effects and treatment

DISEASE OR CONDITION	EFFECT	TREATMENT
Rubella, three day, or German measles	May cause congenital anomalies if contracted during first trimester; may be spread from affected neonate to others through contact	Pregnant woman should contact physician immediately; pregnant women should be tested for rubella antibodies, and those who are susceptible should be immunized a few days after delivery; mothers who contract rubella during pregnancy, as well as their infants, should be isolated during hospitalization
Diabetes mellitus	Increased tendency toward complications such as toxemia, premature labor, stillbirth, oversized infant, neonate mortality, congenital defects, hydramnios, hemorrhage	Instruction for self-care; control of diet and insulin during pregnancy and puerperium; low sodium diet as needed; early delivery if necessary; close observation for signs of hypoglycemia, hyperglycemia, and acidosis
Cardiac disease	Added strain of pregnancy can cause serious complications; overexertion, colds, sore throat, and influenza may cause heart failure if not treated properly	Minimum weight gain, prevention or treatment of anemia, avoidance of exposure to infections and upper respiratory diseases, avoidance of exertion, plenty of rest, close observation for cardiac stress during labor and delivery
Tuberculosis	Disease is easily transmitted to neonate; long, hard labors may have an adverse effect	Mother should follow self-care and preventative measures for infant and others, maintain rest and diet, and take medications as prescribed

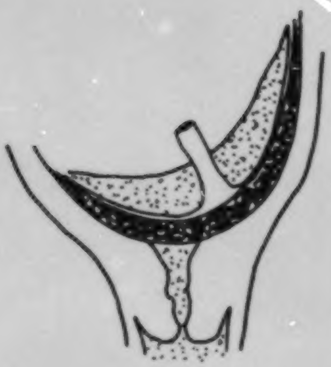
INFORMATION SHEET

DISEASE OR CONDITION	EFFECT	TREATMENT
Syphilis	Active syphilis may cause abortion, premature delivery, or delivery of an infected baby	Test for syphilis at beginning of pregnancy; treatment must be started before eighteenth week of gestation
Gonorrhea	May be transmitted to baby's eyes when baby passes through vagina and cause blindness if not treated; may spread to pelvic cavity before or after but not during pregnancy and cause sterilization	Administration of appropriate antibiotics (NOTE: Neonate should have one percent silver nitrate or other preparation instilled in eyes soon after birth.)
Nutritional anemia (NOTE: Some of the causes are iron-poor diet, increased requirements of fetus during last six weeks of gestation, and mother's inability to assimilate iron.)	Mother will experience weakness, dyspnea, fatigue, pallor, and have a low hemoglobin; may cause her to be predisposed to postpartum infection, and infant will be predisposed to anemia	Mother should take diet with increased iron-rich foods such as green and yellow vegetables, egg yolks, whole grain and enriched cereals, yellow fruits, potatoes, tomatoes, molasses, nuts, raisins, and liver; iron preparations may be prescribed
Herpes (*Herpesvirus hominis,* Type 2) (NOTE: Neonatal infection is relatively rare, but when contracted could be fatal.)	Mother may experience vesicle lesions in genital area, vaginal pain, burning on urination, and perianal pain; infant if infected will have fever, coryza, tachycardia, lesions over mucous membranes, rash over face, palms, and soles of feet (NOTE: Herpes may infect infant through transplacental infection, contamination through birth canal, or direct transmission from infected personnel.)	Early diagnosis and treatment may prevent neonatal infection; a C-section may need to be performed to deliver infant of mother with an active case of herpes 2; use isolation techniques in care of mother and infant

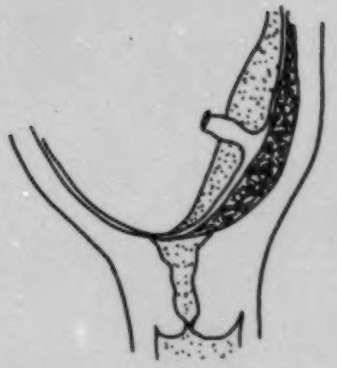
INFORMATION SHEET

DISEASE OR CONDITION	EFFECT	TREATMENT
Narcotic drug abuse	Onset of withdrawal signs in the infant may appear within twenty-four hours after birth: shrill cry, hyperactive, jittery, yawning and sneezing frequently, increased tendon reflexes, but decreased Moro reflex (NOTE: If untreated, the infant may develop fever, diarrhea, apnea, vomiting, dehydration, and convulsion followed by death.)	Monitor closely; administer O_2 if necessary; administer appropriate medications (will depend on drug abused); minimize visual, auditory, and tactile stimuli that could bring on convulsions
Teenage pregnancies	Nutritional deficiencies may cause many conditions including anemias; some teens become obese at this time with consumption of too many fats; infants of teens may be low-weight infants or premature (NOTE: Pregnant teenagers encounter many physical and psychological problems due to their own physical growth development and emotional instability at this period in their lives. Many also lack maturity to make decisions.)	Early counseling to help direct teenage mothers to a healthy diet, exercise program, a plan for birth and care of teen mother's infant (NOTE: A supportive person who works closely with the teenage parents can make a world of difference at this crucial time.)

Placenta Previa Prior to Onset of Labor



Total



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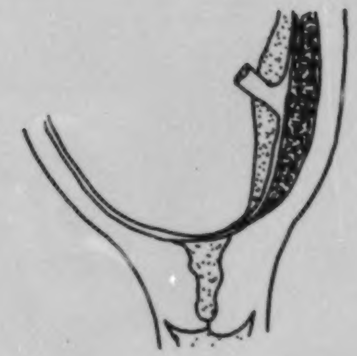

Low Implantation

TM #1

792

793

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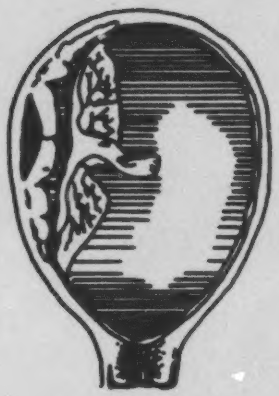
Placenta Abruptio



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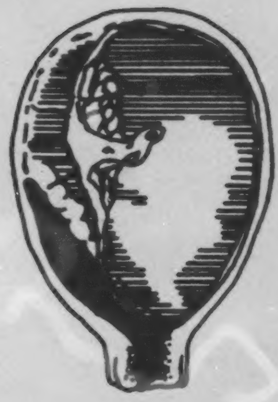

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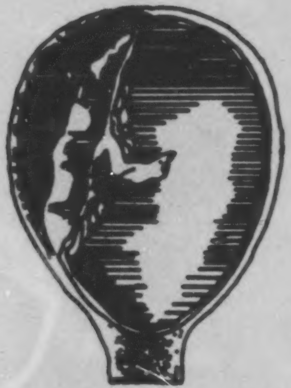

Complete

TM #2

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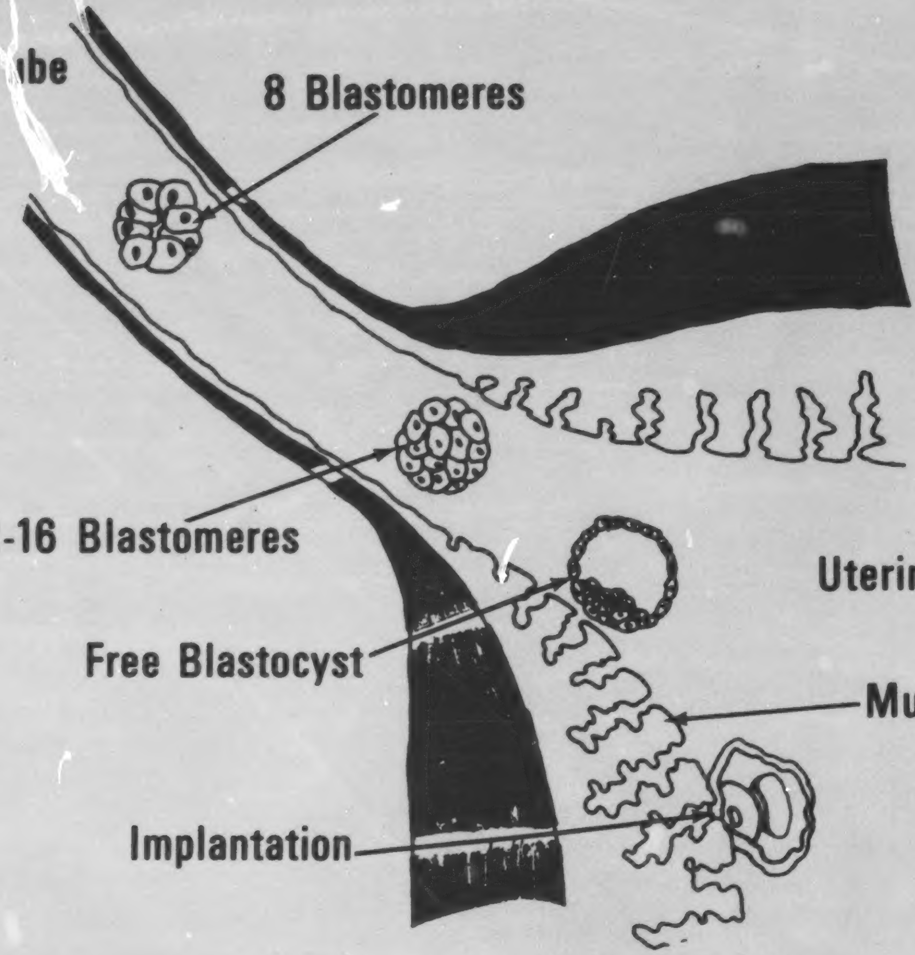
Division and Implantation



Fallopian Tube

8 Blastomeres

12-16 Blastomeres

Uterine Cavity

Free Blastocyst

Mucosa

Implantation

TM #3

796

797

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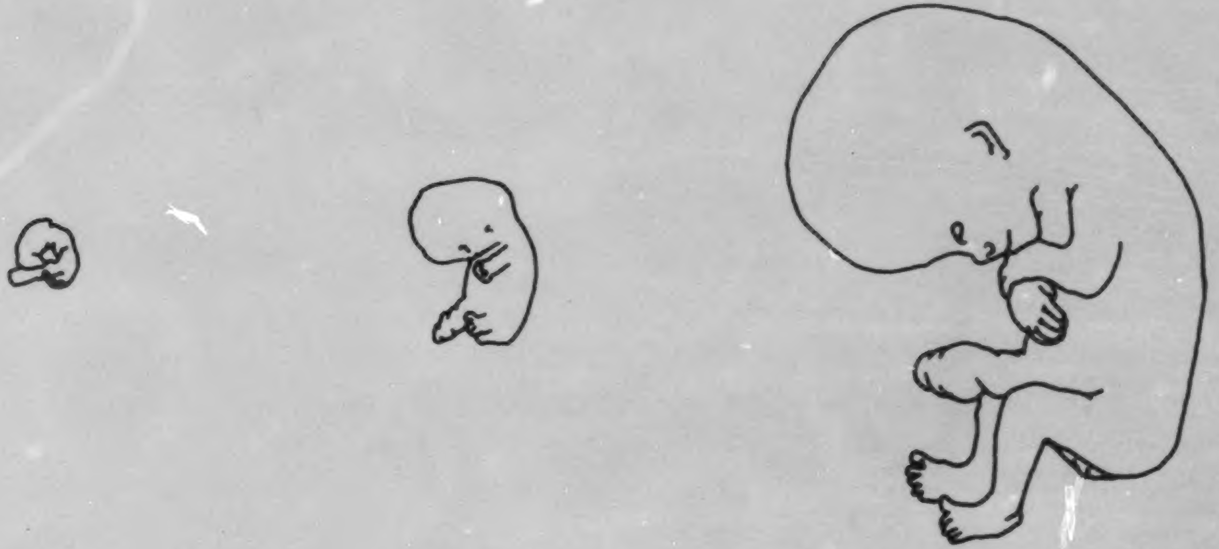
First Three Months of Development

(Actual Size)



One Month

Two Months

Three Months

TM #4

793

793

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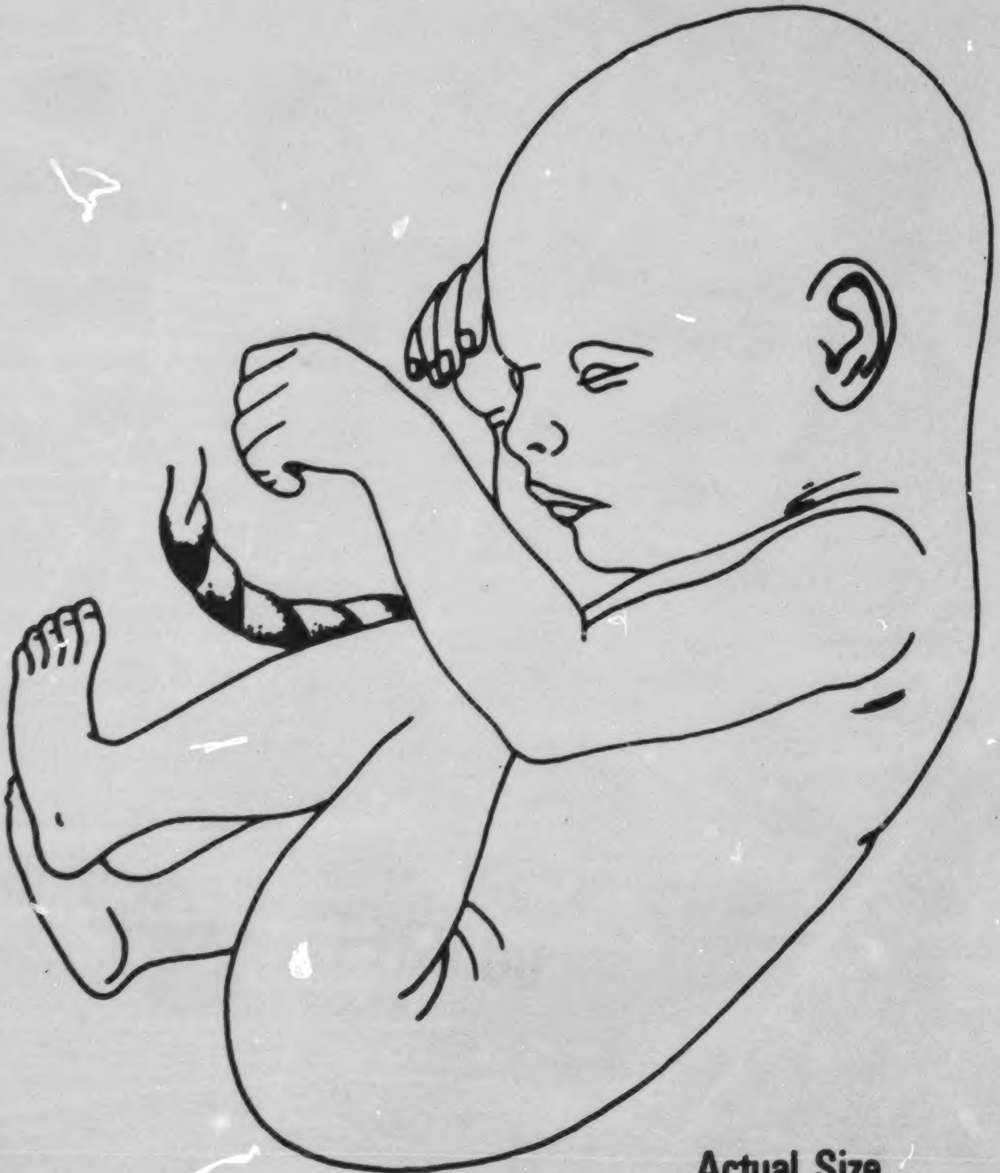
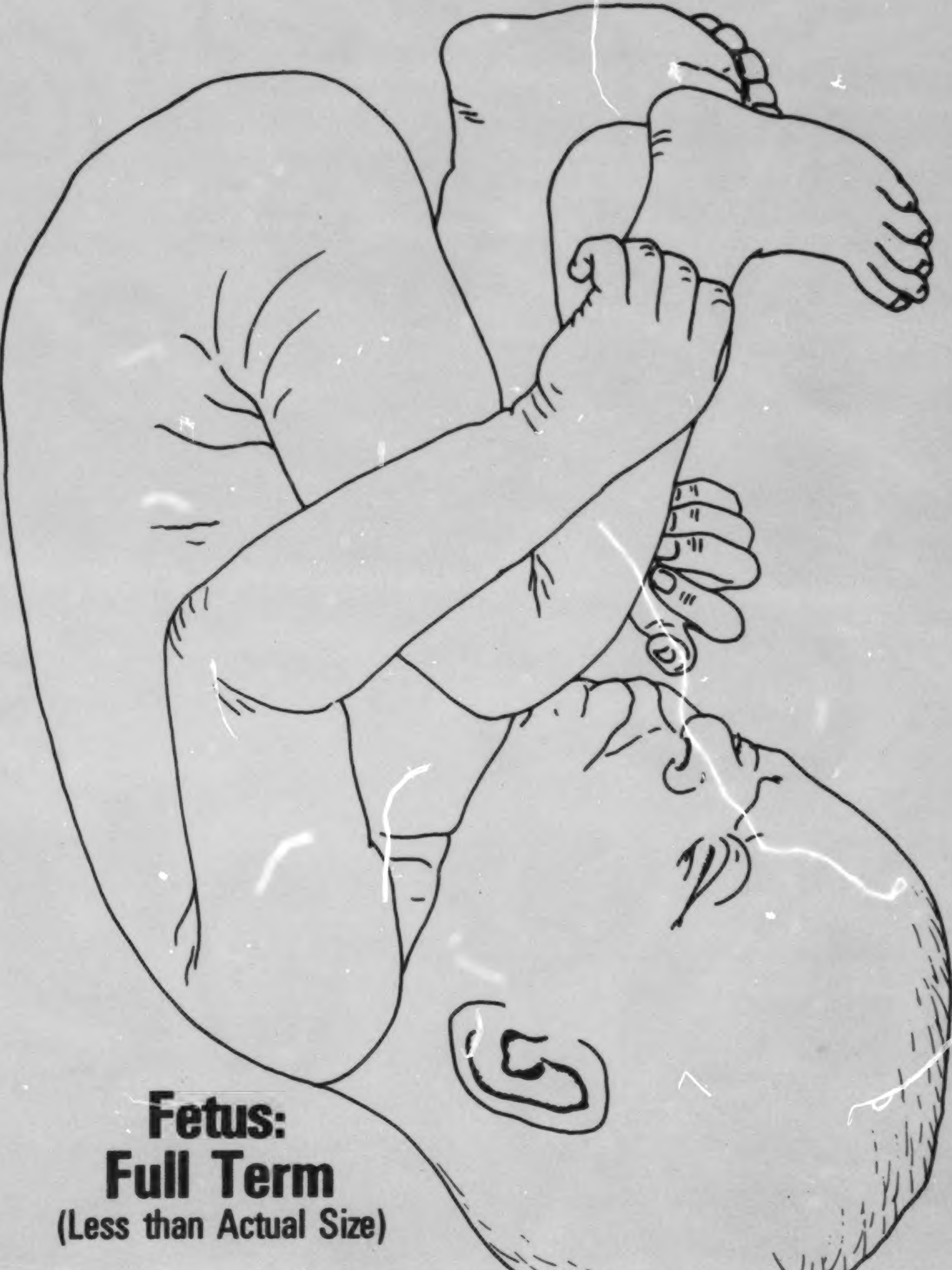
Fetus: Fifth and Sixth Months



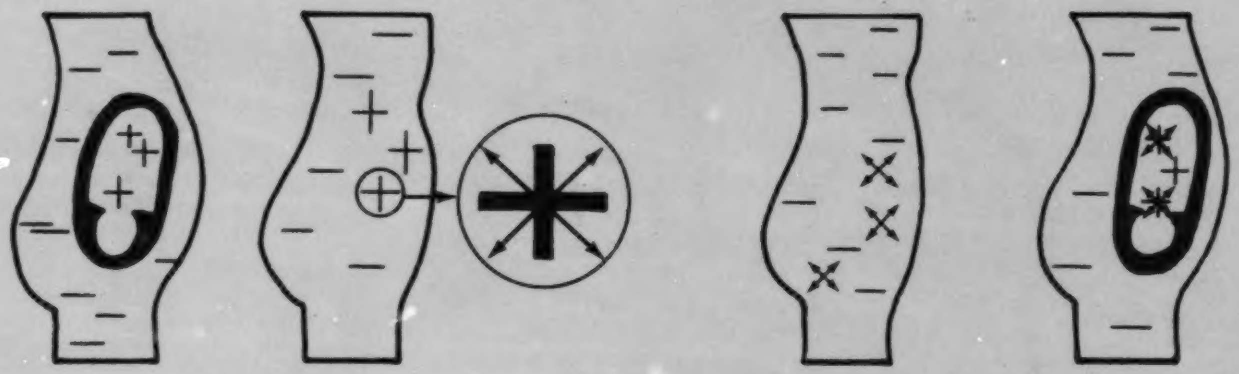
Actual Size

800

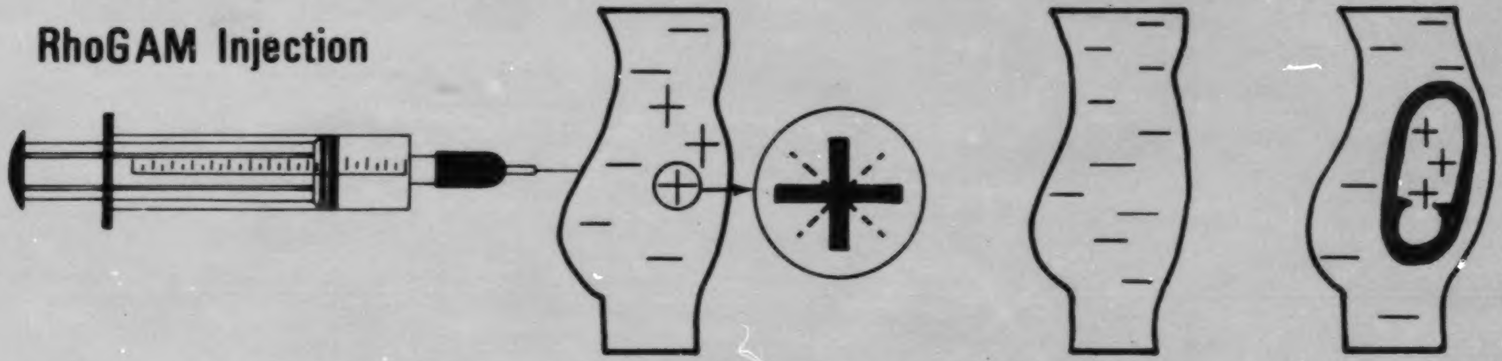


Fetus:
Full Term
(Less than Actual Size)

Maternal Sensitization to Rh Factor



Pregnancy At Delivery After Delivery Later Pregnancy



RhoGAM Injection

At Delivery After Delivery Later Pregnancy

Given after delivery of each Rh positive infant or miscarriage.

TM #7

PN II-69-C

PRENATAL CARE
UNIT II

ASSIGNMENT SHEET #1--PREPARE CARE PLAN FOR A PREGNANT PATIENT

NAME ________________________________ SCORE ______________

Obtaining pertinent data from the pregnant patient is an important part of the initial examination. Data and observations taken in this interview can make a difference in the entire pregnancy and possibly determine whether it will be a healthy experience or one filled with problems or complications. At this time, the nurse and the physician can identify any potential problems and treat them before they become critical.

In this assignment sheet you are given a typical prenatal record that is used to record this initial information. Select a patient, or one will be assigned to you by the instructor, and complete the record. These records are usually completed in duplicate so that one copy remains at the physician's office and one goes to the hospital to become a permanent part of the patient's records. After you complete the form on the following page, answer the questions that follow and hand in to the instructor for evaluation.

72-C

ASSIGNMENT SHEET #1

PRENATAL RECORD

Hospital	Doctor			Date	
Hosp. No.	Office No.	Insurance			
Pts. Name	Age	Race	Relig.	Country of Birth	Occupation
Address	Phone		Marital Status S M W D Sep.	Years Married	Education
Name of Father of Child	Age	Ht.	Wt.	Significant disease	
Business Address	Business Phone		Occupation		Education

FAMILY HISTORY: (Tbc, Hypertension, Heart [illegible], Diabetes, Neuro-Psych., Epilepsy, Alleriges, Mult. Births, Congenital Anom.)

MENSTRUAL HISTORY:Onset at Yrs.	Interval Days	Duration Days	Amt.
Months Preg. Attempted	L.M.P.	Normal?	E.D.C.

PRIOR MEDICAL HISTORY	✓ Pos.	Remarks (include date and time of Rx)	HISTORY SINCE LAST MENSTRUAL PERIOD	✓ Pos.	Remarks (include date and time of Rx)
Kidney Disease			Nausea		
Heart Disease			Vomiting		
Hypertension			Indigestion		
Rheumatic Fever			Constipation		
Tuberculosis			Headache		
Venereal Disease			Bleeding (Specify)		
Gyn. Disorder			Vaginal Discharge		
German Measles			Edema		
Nervous & Mental			Abdominal Pain		
Diabetes			Urinary Complaints		
Thyroid Dysfunction			German Measles		
Phlebitis, Varicosities			Other Virus		
Epilepsy			Radiation (Specify)		
Drug Sensitivity			Accidents		
Allergies			Medications		
Blood Dyscrasia					
Blood Transfusions					
Rh, ABO Sensitivity					
Operations, Accidents					

SUMMARY OF PREVIOUS PREGNANCIES	Full Term	Premature	Abortions	Now Alive	Mult. Births

No.	Year	Place of Confinement	Dur. of Gestation	Dur. of Labor	Type of Delivery	Born A or D	Weight	Complications Maternal	Complications Child

Form developed jointly by the committee on Maternal and Child Care of the American Medical Association and the American College of Obstetricians and Gynecologists.

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ASSIGNMENT SHEET #1

A. Do you consider this patient to be in good health overall?

B. Considering the information you have obtained, do you foresee any problem areas?

C. If so, please list below.

D. As a nurse, how can you assist this patient to have a healthy pregnancy?

E. What information can you give this patient to eliminate some of the minor discomforts that may be experienced during her pregnancy?

PRENATAL CARE
UNIT II

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

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PRENATAL CARE
UNIT II

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with prenatal care to their correct definitions. Write the correct numbers in the blanks. Terms and definitions are continued on the next two pages.

_____ a. Before delivery; antepartum

_____ b. Softening of lower segment of uterus during second and third months of pregnancy

_____ c. Softening of cervix occurring about time of second missed menstrual period

_____ d. Dark blue discoloration of vaginal mucous membrane

_____ e. Dark pigmented line often present in pregnant women and extending from pubes upward in midline

_____ f. Outermost fetal membrane that surrounds the amnion

_____ g. Innermost of fetal membranes forming a fluid-filled sac for protection of embryo

_____ h. Transparent, almost colorless fluid contained in amnion; composed of albumin, urea, creatinine, water, and various salts

_____ i. White, shiny, slightly depressed lines on abdomen, breasts, or thighs following prolonged stretching of skin; stretch marks

_____ j. Brownish pigmentation of face during pregnancy

_____ k. Stage or period of three months of a pregnancy

_____ l. Nausea and vomiting usually in early part of day in first months of pregnancy

_____ m. Stage in development of mammalian embryo

_____ n. Descent of fetal head into pelvic inlet

1. Chloasma gravidarum
2. Chorion
3. Prenatal
4. Amnion
5. Hegar's sign
6. Striae
7. Goodell's sign
8. Amniotic fluid
9. Trimester
10. Linea nigra
11. Chadwick's sign
12. Morning sickness
13. Lightening
14. Blastocyst

TEST

_____o. Pathological condition sometimes occurring in last half of pregnancy with symptoms of hypertension, edema, proteinuria, sodium retention, and convulsions or coma

_____p. Vein which has become abnormally dilated and tortuous because of interference with venous drainage or weakness of vein walls

_____q. Mass of dilated tortuous veins in anorectum; may be external or internal

_____r. Implantation of fertilized ovum outside uterine cavity

_____s. Placenta that is implanted in lower portion of uterus

_____t. Premature separation of placenta before labor or delivery

_____u. Transformation of all or part of placenta into grapelike cysts with rapid growth of uterus and with hemorrhage

_____v. Prolonged and excessive vomiting in pregnancy

_____w. Expansion of an orifice or opening

_____x. Gradual flattening or thinning of cervix during labor

_____y. Mechanical defect in cervix causing dilatation and effacement in early pregnancy

_____z. Transabdominal puncture of amniotic sac to obtain a sample of amniotic fluid

____aa. Any deviation from the usual or normal

____bb. Excessive volume of amniotic fluid

____cc. Blood-tinged mucus discharged from vagina before or during labor

____dd. Curved, hinged instrument with adjustable arms used for measuring pelvis

15. Dilatation
16. Hyperemesis gravidarum
17. Toxemia
18. Placenta abruptio
19. Varicosity
20. Effacement
21. Hemorrhoid
22. Placenta previa
23. Hydatid mole
24. Ectopic pregnancy
25. Incompetent cervical os
26. Bloody show
27. Anomaly
28. Amniocentesis
29. Polyhydramnios
30. Pelvimeter

TEST

____ee. Measurement of dimensions of pelvis

____ff. Product of conception from moment of fertilization to end of eighth week after fertilization

____gg. Developing body in utero from beginning of ninth week after fertilization until birth

____hh. Union of ovum and sperm

____ii. Fertilization of ovum by spermatozoon

____jj. Woman who is pregnant; number of pregnancies of any duration

____kk. Woman during her first pregnancy

____ll. Woman who has been pregnant two or more times

____mm. Refers to previous pregnancies that have reached period of viability

____nn. Woman who is having or has had one viable child

____oo. Woman who has borne more than one viable child

____pp. Act of sexual union; coitus; sexual intercourse

____qq. Enlarged state of erectile tissue when engorged with blood, as of penis or clitoris

____rr. Maturation and discharge of ovum

____ss. Capable of living; capable of growing and developing

____tt. Four weeks; twenty-eight days

____uu. First fetal movement felt by mother, which occurs between sixteenth and twentieth weeks of pregnancy

____vv. Mild, intermittent, painless uterine contractions that occur during pregnancy

____ww. Condition seen in pregnancy or early puerperium, characterized by increasing hypertension, albuminuria, and generalized edema

____xx. Period of intrauterine fetal development from conception through birth

31. Multigravida
32. Fetus
33. Gravida (Gr)
34. Embryo
35. Primigravida
36. Fertilization
37. Pelvimetry
38. Conception
39. Para
40. Ovulation
41. Multipara
42. Erection
43. Primipara
44. Copulation
45. Viable
46. Gestation
47. Lunar month
48. Preeclampsia
49. Braxton Hicks contractions
50. Quickening

TEST

2. Distinguish among presumptive, probable, and positive signs and symptoms of pregnancy. Write a "P" in the blanks before presumptive, a "PR" before probable, and a "PO" in the blanks before positive.

_____a. Amenorrhea

_____b. Fetal movements felt by an examiner

_____c. Frequent urination

_____d. Ultrasonographic detection of fetus

_____e. Morning sickness

_____f. Changes in uterus and cervix

_____g. Fetal heart sounds

_____h. Changes in breasts

_____i. Positive pregnancy test

_____j. Enlargement of abdomen

3. Calculate estimated date of confinement or estimated date of delivery, using Naegele's rule. Last menstrual period was February 6.

EDC or EDD = ____

4. Describe effects of chromosomes in heredity, sex determination, and anomalies.

a. Heredity-- ____

____

____

____

b. Sex determination--____

____

____

____

TEST

c. Anomalies-- ______________________________

5. Describe physiological changes that occur during pregnancy.

a. Cardiovascular and respiratory systems-- ______________________________

b. Digestive system-- ______________________________

c. Endocrine system-- ______________________________

d. Breasts-- ______________________________

TEST

e. Musculoskeletal system--

f. Integumentary system--

g. Urinary system--

h. Reproductive system--

6. Describe the placenta and umbilical cord.

a. Placenta--

TEST

b. Umbilical cord--____________________

7. Select from the following list functions of the placenta. Write an "X" in the blank before each correct answer.

_____a. Provides for nutrition, excretion, and respiration of fetus through contact with uterine blood supply

_____b. Secretes progesterone to inhibit uterine contractions and aid in maintaining pregnancy, estrogen to aid in lactation and growth and development of fetus, and chorionic gonadotrophin to maintain the corpus luteum

_____c. Carries genetic chromosomes

_____d. Acts as protective barrier to prevent some drugs and harmful organisms from entering fetal circulation

_____e. Prevents birth defects

_____f. Provides extra steroids for infant's use

8. Describe stages of prenatal growth.

a. Ovum-- ____________________

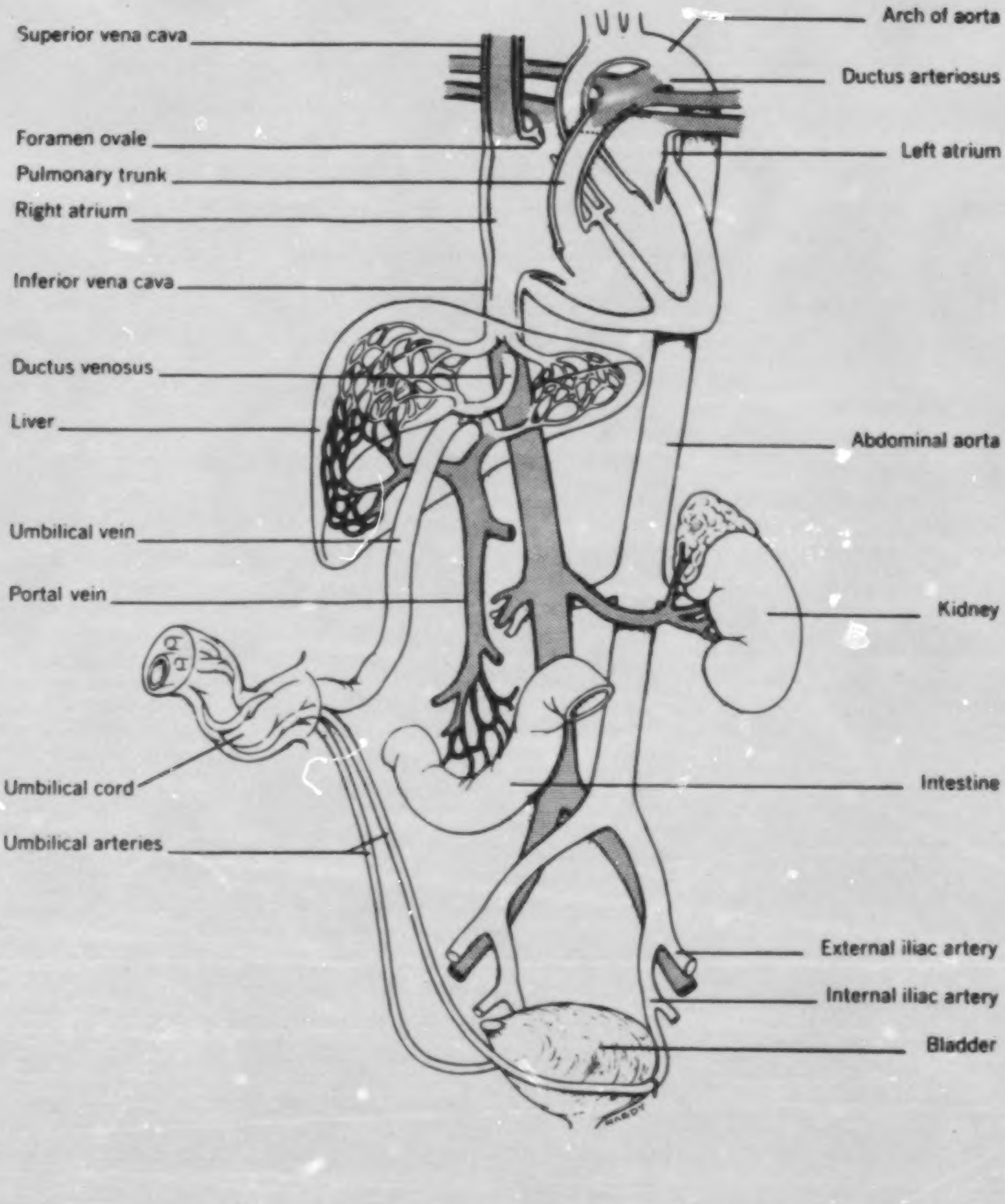
TEST

b. Embryo (to eighth week)--

c. Fetus (ninth week to birth)--

TEST

9. Show pathway of fetal circulation by drawing arrows on the following diagram of the organs and vessels.


Superior vena cava
Foramen ovale
Pulmonary trunk
Right atrium
Inferior vena cava
Ductus venosus
Liver
Umbilical vein
Portal vein
Umbilical cord
Umbilical arteries
Arch of aorta
Ductus arteriosus
Left atrium
Abdominal aorta
Kidney
Intestine
External iliac artery
Internal iliac artery
Bladder

TEST

10. Describe care of the patient during pregnancy.

a. Medical care-- ______________________________

____

____

____

____

____

____

b. Nutrition-- ______________________________

____

____

____

____

____

____

c. Rest and exercise-- ______________________________

____

____

____

____

____

____

____

____

d. Cleanliness-- ______________________________

____

____

____

TEST

e. Breasts-- ______________________________

f. Bowel habits-- ______________________________

g. Clothing-- ______________________________

h. Teeth-- ______________________________

11. Match structures of female reproductive system to their functions. Write the correct numbers in the blanks. Structures and functions are continued on the following page.

_____a. Contains and protects reproductive organs, bladder, and rectum; forms part of birth canal

_____b. Develop and expel a mature ovum each month; produce hormones estrogen and progesterone

_____c. Provide site for union of sperm and ovum; propel ovum into uterus by peristaltic and ciliary actions

_____d. Receives fertilized ovum; provides housing and nourishment for developing fetus

1. Uterus
2. Ovaries
3. Pelvis
4. Fallopian tubes or oviducts

TEST

______e. Secrete mucus

______f. Protects symphysis pubis

______g. Protect inner vulva and clitoris

______h. Organ of sexual excitation

______i. Contains openings of vagina, urethra, and Bartholin's glands

______j. Organ of copulation; forms birth canal

______k. Provides muscular support of pelvic organs

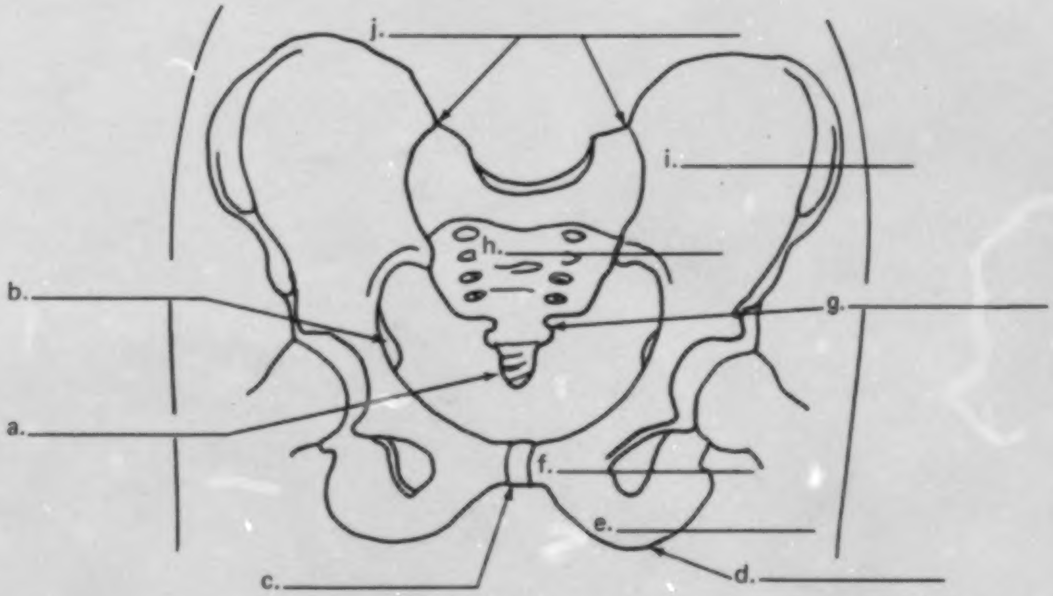
______l. Secrete milk

5. Vagina
6. Mons veneris
7. Vestibule
8. Bartholin's glands
9. Perineum
10. Labia majora and minora
11. Breasts
12. Clitoris

12. Identify parts of the pelvis. Write the correct names in the blanks.

Sacroiliac articulations
Ilium
Sacrococcygeal articulation
Sacrum
Coccyx

Pubis
Ischium
Ischial tuberosity
Symphysis pubis
Ischial spine



TEST

13. Describe pelvic measurements.

a. Anteroposterior or true conjugate--________________________________

____

____

b. Transverse diameter of inlet--______________________________________

____

____

c. Oblique diameters--____

____

____

____

d. Transverse diameter of outlet--____________________________________

____

____

TEST

14. State facts related to the female reproductive system during the menstrual cycle when pregnancy occurs.

THE MENSTRUAL CYCLE AND PREGNANCY

Uterus	Days of Cycle	Ovaries
Menses	1-5	a. ____________________
Endometrium thickens	6-16 b. ____________________	Ovulation occurs; follicle changes to corpus luteum
c. ____________________ ____________________	14-16	Conception occurs; zygote floats through tube
Blastocyst floats freely in uterus Blastocyst implants; outer layer begins forming placenta	17-21 e. ____________________	d. ____________________ ____________________ ____________________ ____________________
f. ____________________ ____________________	12th week	Placenta assumes production of gonadotrophin, progesterone, and other hormones throughout pregnancy

TEST

15. Match to their correct actions anterior pituitary gland hormones that affect reproduction. Write the correct numbers in the blanks.

_____ a. Induces maturation of ovarian follicles and production of estrogen

_____ b. Brings about ovulation and stimulates progesterone production

_____ c. Stimulates secretion of milk by breasts

1. Luteinizing hormone (LH)
2. Luteotropic hormone (LTH)
3. Follicle-stimulating hormone (FSH)

16. Describe steps that take place in conception.

a. Fertilization-- ______________________________

____

____

b. Implantation of zygote-- ______________________________

____

____

____

____

____

____

c. After implantation-- ______________________________

____

____

____

TEST

17. Describe minor discomforts during pregnancy and their causes and treatments.

MINOR DISCOMFORT	CAUSE	TREATMENT
Morning sickness, heartburn, or indigestion	Decrease in gastric secretions and motility, physiological changes due to pregnancy, emotional reactions	a. ______________ ______________ ______________ ______________ ______________
Gingivitis	b. ______________ ______________	Increased intake of vitamin C; use of astringent mouthwash
c. ______________	Diminished gastric motility, pressure of uterus on intestines	Adequate fluid intake; increased intake of fruit, vegetables, and other foods containing cellulose; physical activity such as walking; mild laxative or enema, *but only as prescribed*
Vaginal discharge	Natural increase of secretions of vaginal and cervical glands, infections such as Monilia or Trichomonas, cervical erosion	d. ______________ ______________ ______________ ______________
Shortness of breath	e. ______________ ______________ ______________ ______________	Change of position from supine to Sims'; elevation of upper part of body when sleeping or resting

TEST

MINOR DISCOMFORT	CAUSE	TREATMENT
f. ________	Excess of phosphorus in body, pressure of uterus on nerves and blood vessels supplying lower extremities, ingestion of too much or too little milk, fatigue	Calcium lactate, calcium gluconate, or vitamin B supplements as prescribed; pressure on toes to force them upward and to straighten knee
Dependent edema	Decreased circulatory efficiency in feet and legs in advanced pregnancy, increased pressures on groin and lower body	g. ________ ________ ________ ________
Physiologic edema	h. ________ ________	Limitation of salt intake, notification of physician
i. ________	Change of posture and balance, weight of pregnancy, remaining in one position too long, poor body mechanics	Change of position or activity, exercise, support with girdle
Varicosities in legs, groin, and/or vulva	Increased abdominal pressure, prolonged standing, tight clothing, familial tendency	j. ________ ________ ________
Hemorrhoids	k. ________ ________	Regular bowel habits, sitz baths, application of analgesic ointments or suppositories if prescribed
l. ________	Stretching and rupturing of internal tissues	Massage of affected skin with lotion

TEST

18. Describe causes and treatments of some complications of pregnancy

a. Hemmorrhage

1) Causes-- ______________________________

____

____

____

2) Treatment and nursing responsibilities-- ______________________________

____

____

____

____

____

____

b. Hyperemesis gravidarum

1) Causes-- ______________________________

____

____

____

____

2) Treatment and nursing responsibilities-- ______________________________

____

____

____

____

____

TEST

c. Preeclampsia and eclampsia (toxemias of pregnancy)

1) Causes--

2) Treatment and nursing responsibilities--

d. Incompetent cervical os

1) Cause--

2) Treatment--

TEST

e. Blood incompatibilities

1) Rh factor

a) Causes-- ______________________________

b) Treatment-- ______________________________

2) ABO incompatibility

a) Causes-- ______________________________

b) Treatment-- ______________________________

TEST

19. State diseases or conditions that affect mother and/or fetus, and effects or treatment.

DISEASE OR CONDITION	EFFECT	TREATMENT
a. ________	May cause congenital anomalies if contracted during first trimester; may be spread from affected neonate to others through contact	Pregnant woman should contact physician immediately; pregnant women should be tested for rubella antibodies, and those who are susceptible should be immunized a few days after delivery; mothers who contract rubella during pregnancy, as well as their infants, should be isolated during hospitalization
Diabetes mellitus	b. ________	Instruction for self-care; control of diet and insulin during pregnancy and puerperium; low-sodium diet as needed; early delivery if necessary; close observation for signs of hypoglycemia, hyperglycemia, and acidosis
Cardiac disease	Added strain of pregnancy can cause serious complications; overexertion, colds, sore throat, and influenza may cause heart failure if not treated properly	c. ________
Tuberculosis	d. ________	Mother should follow self-care and preventative measures for infant and others, maintain rest and diet, and take medications as prescribed

TEST

DISEASE OR CONDITION	EFFECT	TREATMENT
Syphilis	Active syphilis may cause abortion, premature delivery, or delivery of an infected baby	e. ______
f. ______	May be transmitted to baby's eyes when baby passes through vagina and cause blindness if not treated; may spread to pelvic cavity before or after but not during pregnancy and cause sterilization	Administration of appropriate antibiotics
g. ______	Mother will experience weakness, dyspnea, fatigue, pallor, and have a low hemoglobin; may cause her to be predisposed to postpartum infection, and infant will be predisposed to anemia	Mother should take diet with increased iron-rich foods such as green and yellow vegetables, egg yolks, whole grain and enriched cereals, yellow fruits, potatoes, tomatoes, molasses, nuts, raisins, and liver; iron preparations may be prescribed
Herpes (*Herpesvirus hominis,* Type 2)	h. ______	Early diagnosis and treatment may prevent neonatal infection; a C-Section may need to be performed to deliver infant of mother with an active case of herpes 2; use isolation techniques in care of mother and infant

TEST

DISEASE OR CONDITION	EFFECT	TREATMENT
Narcotic drug abuse	Onset of withdrawal signs in the infant may appear within 24 hours after birth; shrill cry, hyperactive, jittery, yawning and sneezing frequently, increased tendon reflexes but decreased Moro reflex. (NOTE: If untreated the infant may develop fever, diarrhea, apnea, vomiting, dehydration, and convulsions followed by death.)	i. ______________
Teenage pregnancies	j. ______________	Early counseling to help direct teenage mothers to a healthy diet, exercise program, a plan for birth and care of teen mother's infant

TEST

(NOTE: Test question 20 lists the assignment sheet. It is an important part of this test. If it has not been completed, check with your instructor.)

20. Prepare care plan for a pregnant patient.

PRENATAL CARE
UNIT II

ANSWERS TO TEST

1.

a.	3	n.	13	aa.	27	nn.	43
b.	5	o.	17	bb.	29	oo.	41
c.	7	p.	19	cc.	26	pp.	44
d.	11	q.	21	dd.	30	qq.	42
e.	10	r.	24	ee.	37	rr.	40
f.	2	s.	22	ff.	34	ss.	45
g.	4	t.	18	gg.	32	tt.	47
h.	8	u.	23	hh.	36	uu.	50
i.	6	v.	16	ii.	38	vv.	49
j.	1	w.	15	jj.	33	ww.	48
k.	9	x.	20	kk.	35	xx.	46
l.	12	y.	25	ll.	31		
m.	14	z.	28	mm.	39		

2.

a.	P	f.	PR
b.	PO	g.	PO
c.	P	h.	P
d.	PO	i.	PR
e.	P	j.	PR

3. EDC or EDD would be November 13

4. Description should include

   a. Heredity--Each mature ovum and sperm has twenty-three chromosomes composed of an unknown number of genes whose units transmit hereditary characteristics

   b. Sex determination--Female chromosomes carry two type X sex chromosomes; male sex chromosomes carry both type X and Y; sex is determined by male chromosomes

ANSWERS TO TEST

c. Anomolies

1) Chromosomes may divide with too much or too little material transmitted

2) Chromosomes break, and parts of two chromosomes unite to form crossover of material

3) Transmission of too many or too few chromosomes, or of incomplete chromosomes, results in congenital malformation

5. Description should include

a. Cardiovascular and respiratory systems

1) Blood volume increases thirty to forty percent to supply fetus

2) Blood pressure remains about same as before pregnancy

3) Heart and lungs are gradually displaced upward by growing fetus

4) Pulse and respiratory rate increase

5) Blood becomes richer in protein

b. Digestive stystem

1) Stomach and intestines are displaced upward

2) Tone and motility of tract, and secretion of stomach acid and pepsin, decrease; digestive process becomes slower, and constipation occurs frequently

c. Endocrine system

1) Glands increase in size and activity

2) Metabolism rate gradually increases as much as twenty-five percent to provide for growing fetus and to provide energy necessary to carry increasing load

d. Breasts

1) Blood vessels and secreting glands enlarge, producing a sensation of fullness; breasts may have a tingling sensation

2) Breasts, nipples, and areola enlarge and become more pigmented

e. Musculoskeletal system

1) Symphysis pubis loosens and becomes more pliable as cartilage softens

2) Lordosis increases due to weight increase

3) Hip joints loosen and separate, resulting in wider pelvic girdle

4) Pendulous abdomen may require additional support

ANSWERS TO TEST

f. Integumentary system

  1) Striae appear on breasts, abdomen, thighs, and buttocks

  2) Pigmentation may increase on face or abdomen

g. Urinary system

  1) Kidneys must increase output

  2) Frequency of urination occurs in first and third trimesters due to increased pressure on bladder

h. Reproductive system

  1) Uterus increases greatly in size from solid organ to thin-walled muscular sac

  2) Cervix softens early in pregnancy

  3) Vaginal mucosa thickens; vaginal muscles hypertrophy

  4) Perineal skin and muscles hypertrophy; connective tissue loosens

6. Description should include

a. Placenta

  1) Dark red, circular organ about eight inches in diameter and one to one-and-one-half inches thick

  2) Weight is approximately one to two pounds

  3) Fetal side is smooth and glistening, with blood vessels clearly visible; maternal side is irregularly rough and composed of many small lobes called *cotyledons*

  4) Fingerlike projections from chorion penetrate uterine wall to provide nourishment for fertilized ovum

  5) Full development is reached by the twelfth week of pregnancy

b. Umbilical cord

  1) Composed of two arteries and one vein intertwined and covered by a soft jellylike substance called *Wharton's jelly*

  2) Attaches to center of placenta and enters fetus at approximate center of abdominal wall

7. a, b, d

ANSWERS TO TEST

8. Description should include

   a. Ovum

      1) Mature ovum and sperm, each with twenty-three chromosomes, unite to produce a fertilized ovum with forty-six chromosomes
      2) Zygote begins to divide rapidly, forming two cells, then four cells, eight cells, and so on
      3) Cells continue to divide to form a hollow ball (blastocyst) with an inner and outer layer of cells
      4) Outer layer of cells sends out projections which will develop into the placenta and become implanted in uterine wall

   b. Embryo (to eighth week)

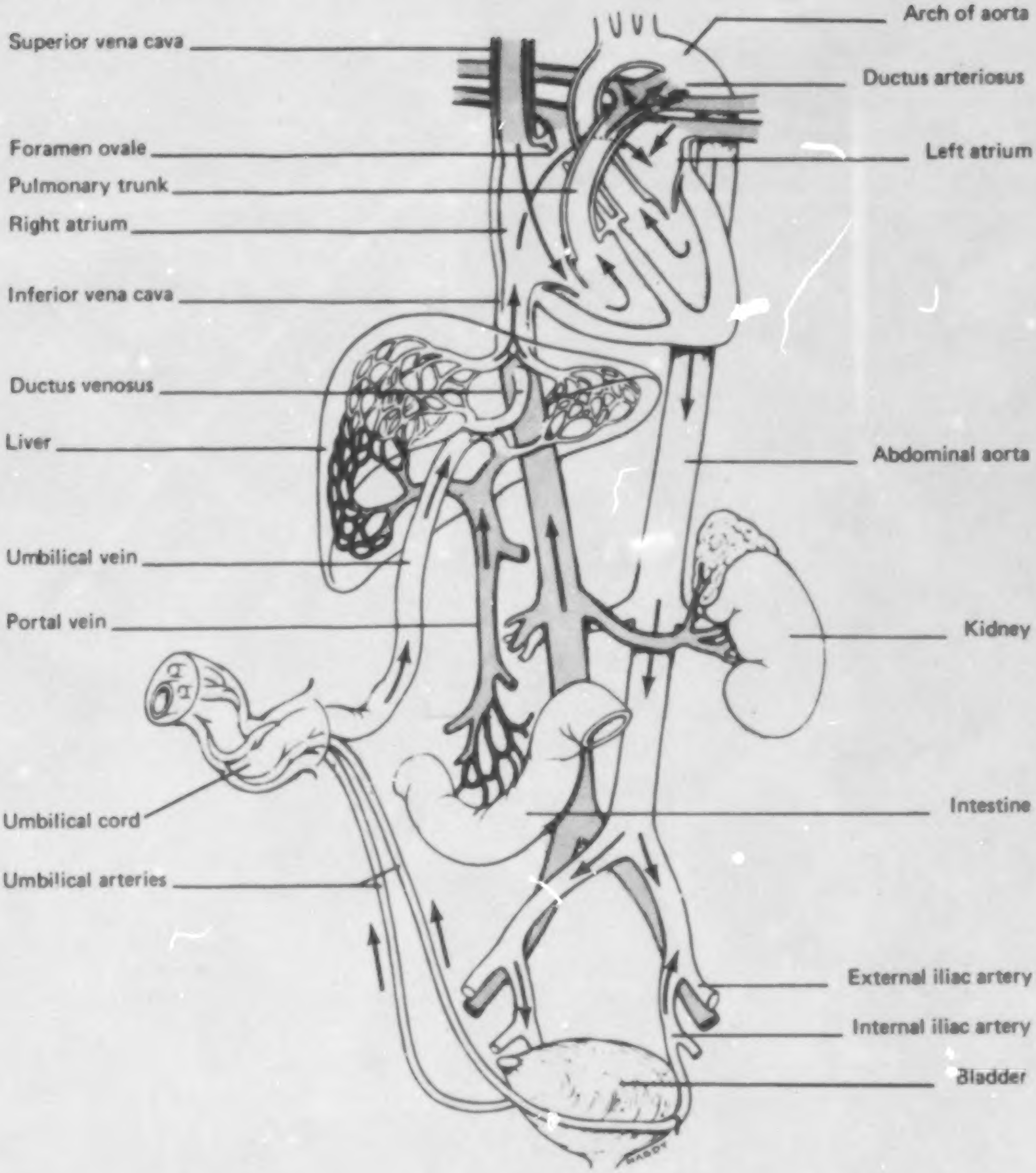
      1) Cell division and growth continue
      2) Inner layer of cells divides into three distinct layers that begin the formation of specific body structures
      3) Embryo is about one-quarter of an inch long
      4) All organs are formed

   c. Fetus (ninth week to birth)

      1) Head becomes prominent with recognizable features; is about one-inch long by second lunar month
      2) Bones, baby teeth, fingers, and toes begin to form; sex can be determined by third lunar month
      3) Fetus grows to six inches in length and four ounces in weight by fourth lunar month
      4) Fetal heart becomes audible and mother feels movement by fifth lunar month
      5) Resembles miniature baby by sixth lunar month; considered viable, but usually will not survive if delivered
      6) Weighs two-and-one-half pounds by end of seventh lunar month; good chance for survival
      7) Body begins to fill out with subcutaneous layer of fat; fetus weighs about six pounds by eighth lunar month; chance of survival is very good
      8) Length of term varies from 240 to 300 days; usual length is 280 days, or 10 lunar months, or 40 weeks

ANSWERS TO TEST

9.


Superior vena cava
Arch of aorta
Ductus arteriosus
Foramen ovale
Left atrium
Pulmonary trunk
Right atrium
Inferior vena cava
Ductus venosus
Liver
Abdominal aorta
Umbilical vein
Kidney
Portal vein
Intestine
Umbilical cord
Umbilical arteries
External iliac artery
Internal iliac artery
Bladder

ANSWERS TO TEST

10. Description should include

   a. Medical care

      1) Patient should obtain an initial physical examination

      2) Patient should have early and regular physical checkups with urinalysis, weight determination, blood pressure reading, and breast examination; during last trimester, vaginal examination is done to determine condition of cervix and position and presentation of fetus

   b. Nutrition

      1) Proper diet based on basic four food groups is encouraged

      2) Increased caloric intake of approximately 200 calories per day is suggested, with emphasis on increased protein rather than fats or carbohydrates

      3) Vitamin/mineral supplements as prescribed and an increased intake of liquids is recommended

   c. Rest and exercise

      1) Usual activities are permitted, but with more frequent periods for resting because of increasing metabolism

      2) Exercises to preserve muscle strength and tone and special exercises to aid in labor and delivery are taught in prepared childbirth classes

      3) Body alignment changes as center of gravity changes, and special exercises should be done to assist in pelvic realignment

      4) Prolonged sitting increases pooling of blood in the legs and should be avoided

   d. Cleanliness

      1) Tub baths are usually permitted until the membranes rupture; however, caution should be taken in later months of pregnancy due to size and problems with balance

      2) Vaginal douching is prohibited

      3) Striae may be massaged with skin cream or lotion

   e. Breasts

      1) Well-fitting bras to support breasts are recommended as the weight and size of breasts increase

      2) Patient should be instructed to clean nipples daily and to apply lanolin or cream as needed to prevent irritation or cracking

ANSWERS TO TEST

f. Bowel habits

  1) Constipation should be treated with adequate fluid intake and increased intake of fruits and vegetables

  2) Patient should use laxatives only as prescribed

g. Clothing

  1) Patient should be advised not to wear clothes that restrict or interfere with circulation

  2) Patient should wear low-heeled shoes to assist in maintaining balance

  3) Abdominal support may be needed in latter part of pregnancy

h. Teeth--Patient is advised to seek early and regular dental checkups with necessary follow-up treatment

11. a. 3
  b. 2
  c. 4
  d. 1
  e. 8
  f. 6
  g. 10
  h. 12
  i. 7
  j. 5
  k. 9
  l. 11

12. a. Coccyx
  b. Ischial spine
  c. Symphysis pubis
  d. Ischial tuberosity
  e. Ischium
  f. Pubis
  g. Sacrococcygeal articulation
  h. Sacrum
  i. Ilium
  j. Sacroiliac articulations

13. Description should include

  a. Anteroposterior or true conjugate

    1) Diameter from sacrum to upper margin of symphysis pubis

    2) Usally measures 11 cm or more

ANSWERS TO TEST

b. Transverse diameter of inlet

1) Measurement across widest portion of pelvic inlet

2) Usually measures 13.5 cm

c. Oblique diameters

1) Measurement from point on sacroiliac articulation to iliopubic eminence on opposite side of pelvis

2) Usually measures 12.5 cm or more

d. Transverse diameter of outlet

1) Distance between two ischial tuberosities

2) Usually measures 8 cm or more

14. a. Follicle matures

b. 10-14

c. Fertile period; endometrium continues to thicken

d. Corpus luteum enlarges in response to chorionic gonadotrophin produced by placenta; continues production of progesterone and estrogen for approximately three months

e. 21-22

f. Placenta fully formed

15. a. 3

b. 1

c. 2

16. Description should include

a. Fertilization

1) Usually occurs in upper portion of fallopian tube

2) May occur in abdominal cavity before ovum enters fallopian tube

ANSWERS TO TEST

b. Implantation of zygote

  1) Fertilized ovum begins cell division and passes through fallopian tube in three days

  2) After floating freely in uterine cavity for three or four more days, it begins implantation, usually in upper posterior wall

  3) Outer layer of cells begins penetrating uterine wall; and by end of approximately twelve weeks, placenta is fully formed

c. After implantation

  1) Endometrium becomes thick and vascular

  2) Nutrients and vitamins to nourish fetus are stored in endometrium

17. a. Frequent small meals, dry food eaten before rising, and medication such as antacids

  b. Deficiency of vitamin C, ascorbic acid

  c. Constipation

  d. More frequent bathing with particular attention to vaginal and perineal area, treatment of infection as prescribed

  e. Pressure of uterus on the diaphragm or descending aorta, supine position during latter half of pregnancy

  f. Leg cramps

  g. Frequent change of position, elevation of legs when possible

  h. Increased fluid in circulatory system, toxemia

  i. Backache

  j. Elimination of tight clothing, frequent change of position, elevation of legs periodically, application of support hose before getting out of bed, prevention of constipation

  k. Constipation, increased pressure of uterus

  l. Striae

18. Description should include

  a. Hemorrhage

    1) Causes

      a) Early in pregnancy, may be caused by abortion, ectopic pregnancy, or hydatid mole

ANSWERS TO TEST

b) Late in pregnancy, may be caused by placenta previa or placenta abruptio

2) Treatment and nursing responsibilities

a) Observe vital signs

b) Observe amount and character of bleeding

c) Treat hemorrhage and shock as prescribed

d) Save any expelled tissue for examination

e) Observe aseptic technique to prevent infection

f) Provide emotional support

b. Hyperemesis gravidarum

1) Causes

a) Hormonal changes

b) Maladjustment of maternal metabolism

c) Change in gastric motility

d) Toxicity

e) Anxiety and/or emotional problems

2) Treatment and nursing responsibilities

a) Adequate care of morning sickness may prevent condition

b) When hospitalization is required, treatment may include bed rest, IV therapy, medication to relieve symptoms, accurate intake and output, and emotional support

c. Preeclampsia and eclampsia (toxemias of pregnancy)

1) Causes

a) Poor nutrition

b) Inadequate protein intake

c) Excessive weight gain

d) Hypertension

e) Diabetes

ANSWERS TO TEST

- f) History of toxemia in patient or family
- g) Impaired renal function

2) Treatment and nursing responsibilities

- a) Early and continued prenatal care with observation for early symptoms
- b) Limited weight gain with a restricted sodium intake, administration of diuretics
- c) Increased rest and quiet
- d) Medication as needed to lower blood pressure and hyperexcitability
- e) Increased fluid intake, restricted food intake as indicated
- f) Protection in the event of convulsions, sedatives if needed
- g) Check deep tendon reflexes as labor begins
- h) Close observation for further complications until after delivery; termination of pregnancy if condition persists

d. Incompetent cervical os

- 1) Cause--Unknown but may be due to trauma
- 2) Treatment--Shirodkar operation or purse-string suture

e. Blood incompatibilities

- 1) Rh factor
  - a) Causes
    - (1) Rh-negative mother conceives baby with Rh-positive father
    - (2) Rh-positive gene is dominant
    - (3) Sensitization of mother to Rh factor may occur during labor and delivery of first baby or may result from receiving a transfusion with Rh-positive blood
    - (4) After sensitization, mother begins producing antibodies
    - (5) During subsequent pregnancies, antibodies from mother cross placental barrier and cause destruction of red blood cells in fetus

ANSWERS TO TEST

b) Treatment

(1) Development of antibodies can be prevented by administration of anti-Rh globulin within seventy-two hours following delivery

(2) Amniocentesis may be done to determine if sensitization has occurred; intrauterine fetal transfusion may be performed if indicated

2) ABO incompatibility

a) Causes

(1) Mother with type O blood conceives baby with a father with type A, B, or AB blood

(2) Blood cells of fetus hemolyze due to maternal antibodies, but reaction is usually less severe than Rh incompatibility

(3) Condition can occur in firstborn but does not increase in severity in subsequent pregnancies

b) Treatment--No treatment of mother is needed

19. a. Rubella, three day, or German measles

b. Increased tendency toward complications such as toxemia, premature labor, stillbirth, oversized infant, neonate mortality, congenital defects, hydramnios, hemorrhage

c. Minimum weight gain, prevention or treatment of anemia, avoidance of exposure to infections and upper respiratory diseases, avoidance of exertion, plenty of rest, close observation for cardiac stress during labor and delivery

d. Disease is easily transmitted to neonate; long, hard labors may have an adverse effect

e. Test for syphilis at beginning of pregnancy; treatment must be started before eighteenth week of gestation

f. Gonorrhea

g. Nutritional anemia

h. Mother may experience vesicle lesions in genital area, vaginal pain, burning on urination, and perianal pain; infant if infected will have fever, coryza, tachycardia, lesions over mucous membranes, rash over face, palms, and soles of feet

i. Monitor closely; administer O_2 if necessary; administer appropriate medications (will depend on drug abused); minimize visual, auditory, and tactile stimuli that could bring on convulsions

ANSWERS TO TEST

j. Nutritional deficiencies may cause many conditions including anemias; some teens become obese at this time with consumption of too many fats; infants of teens may be low-weight infants or premature

20. Evaluated to the satisfaction of the instructor

CARE OF THE PATIENT IN LABOR AND DELIVERY
UNIT III

UNIT OBJECTIVE

After completing this unit, the student should be able to give care to the patient during labor and delivery. This knowledge will be shown by completing assignment sheet, job sheets, and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

1. Match terms associated with labor to their correct definitions.
2. Select from a list signs and symptoms of labor.
3. List possible reasons for the onset of labor.
4. Describe functions of the pelvis and uterus during labor.
5. Distinguish between signs of true and false labor.
6. Label presentations and positions of fetus in relationship to the mother.
7. Match stations of descent to their correct descriptions.
8. Describe the first stage of labor.
9. State nursing responsibilities when admitting a patient in labor.
10. Describe nursing responsibilities during the first stage of labor.
11. Select from a list maternal danger signals.
12. List fetal danger signals.
13. State facts related to complications of labor.
14. Distinguish between indications and contraindications for induction of labor.
15. Match terms associated with delivery to their correct definitions.
16. Describe advantages and disadvantages of types of anesthesia used during delivery.
17. List procedures necessary to prepare delivery room.
18. List characteristics of the second stage of labor.

OBJECTIVE SHEET

19. State nursing responsibilities during transfer and preparation of patient in delivery room.
20. Select from a list nursing responsibilities during the second stage of labor.
21. State procedures used during delivery of infant.
22. State nursing responsibilities for immediate care of the newborn.
23. List characteristics of the third stage of labor.
24. Select from a list characteristics of the fourth stage of labor.
25. State nursing responsibilities for care of mother during the fourth stage of labor.
26. Discuss the cesarean section.
27. Describe nursing responsibilities for patient having cesarean section.
28. Arrange in order steps to take when an emergency delivery is performed.
29. Complete an obstetrical care study.
30. Demonstrate the ability to
    a. Perform a perineal prep.
    b. Time uterine contractions.
    c. Monitor fetal heart rate.
    d. Test for deep tendon reflexes (DTRs).

CARE OF THE PATIENT IN LABOR AND DELIVERY
UNIT III

SUGGESTED ACTIVITIES

I. Suggested activities

A. Order materials planned to supplement unit.

1. Films

   a. *Story of Eric.* Color, 33 minutes, Centre Films, 1971. Available from Centre Films, 1103 North El Centre Avenue, Hollywood, California 90038.

   b. *Have a Healthy Baby: Labor and Delivery;* Color, 29 minutes, Churchill Films, 1978. Available from Churchill Films, 622 North Robertson Boulevard, Los Angeles, California 90069.

   (NOTE: The above films are available on a free-loan basis only to Oklahoma teachers. These teachers may order from the Oklahoma State Department of Vocational and Technical Education/ Curriculum and Instructional Materials Center, 1500 West Seventh Avenue, Stillwater, Oklahoma 74074. Other teachers may order from the addresses above.)

   c. *Cesarean Section by Hypnosis.* Black and white, Upjohn. Available from Professional Resources Program, 565 Fifth Avenue, New York, New York 10017.

2. Filmstrips

   (NOTE: The following filmstrips are available from Trainex Corporation, P.O. Box 116, Garden Grove, California 92642.)

   a. *Disorders of the Female Reproductive System-Complications of Labor: Features of Labor.*

   b. *Labor.*

   c. *Labor and Delivery.*

   d. *Make Room for Dad.*

   e. *An Introduction to Prepared Childbirth.*

   f. *The Family Following Childbirth.*

3. Cervical dilatation chart. Available from Ross Laboratories, Educational Services Department 441, 625 Cleveland Avenue, Columbus, Ohio 43216.

SUGGESTED ACTIVITIES

B. Make transparencies.

C. Provide students with objective sheet.

D. Provide students with information and assignment sheets.

E. Discuss unit and specific objectives.

F. Discuss information and assignment sheets.

(NOTE: Provide all forms used in hospital for students to become familiar with their use.)

G. Illustrate effacement and dilatation of cervix with a knitted uterus, sweater sleeve, or sock.

(NOTE: The knitted uterus was designed by a staff member of the American Red Cross Unit. Instructions may be obtained through your local chapter.)

H. Discuss completed assignment sheet in class.

I. Assign students to develop a case study on an assigned patient as they follow her through labor, delivery, and postpartum stages. If possible, allow student to care for both infant and mother. Compiled information could be put into notebook form with copies of labor, delivery records, and pictures.

J. Demonstrate use of the fetal heart monitor used in the facility in your community or where you will be doing clinical work.

K. Obtain your hospital's policies and procedures concerning the administration of magnesium sulfate for eclampsia treatment; provide in-service training of this procedure if students will have this responsibility as an employee.

L. Demonstrate and discuss procedures outlined in job sheets.

M. Give test.

N. Reteach if necessary.

II. Instructional materials

A. Objective sheet

B. Suggested activities

C. Information sheet

SUGGESTED ACTIVITIES

D. Transparency masters
   1. TM #1--Musculature of the Uterus
   2. TM #2--Before Labor and Early Effacement
   3. TM #3--Complete Effacement and Complete Dilatation
   4. TM #4--Cervical Dilatation
   5. TM #5--Fetal Skull
   6. TM #6--Engagement and Descent
   7. TM #7--Beginning Extension
   8. TM #8--Complete Extension
   9. TM #9--External Rotation
   10. TM #10--Apgar Scoring Chart
   11. TM #11--Delivery of Placenta (Third Stage of Labor)

E. Assignment Sheet #1--Complete an Obstetrical Care Study

F. Answers to assignment sheet

G. Job sheets
   1. Job Sheet #1--Perform a Perineal Prep
   2. Job Sheet #2--Time Uterine Contractions
   3. Job Sheet #3--Monitor Fetal Heart Rate
   4. Job Sheet #4--Test for Deep Tendon Reflexes (DTRs)

H. Test

I. Answers to test

III. Unit references

A. Anderson, Barbara, and Pamela Shapiro. *Obstetrics for the Nurse.* Albany, New York: Delmar Publishers, 1979.

B. Jensen, Margaret Duncan, Ralph C. Benson, and Irene M. Bobak. *Maternity Care: The Nurse and the Family.* St. Louis: The C.V. Mosby Co., 1977.

CARE OF THE PATIENT IN LABOR AND DELIVERY
UNIT III

INFORMATION SHEET

I. Terms associated with labor and their definitions

A. Amniotic sac--Amnion; bag of waters

B. Amniotomy--Tearing or breaking of fetal membranes; rupture of membranes

(NOTE: Amniotomy may be spontaneous or performed by the physician with an instrument. It is characterized by a sudden gush of fluid from the vagina.)

C. Attitude--Position assumed by fetus in utero

D. Boggy--Soft and spongy to palpation

E. Cephalopelvic--Pertaining to head of fetus and pelvis of mother

F. Contractile--Having the power or tendency to contract

G. Crowning--Stage in delivery when fetal head presents at vulva

H. Disproportion--Abnormal size relationship between two objects

I. Lanugo--Downlike hair that covers fetus from approximately the fifth month of gestation

J. Meconium--Pasty, greenish mass that collects in intestine of fetus; consists of mucus, epithelial cells, bile, lanugo, and vernix caseosa

K. Molding--Conforming to a given shape, as the fetal head in its passage through the birth canal

L. Mucous plug--Mass of thick, tenacious mucus which fills cervix during pregnancy and is discharged at beginning of labor

M. Oxytocin--Drug that stimulates uterine contractions

N. Position--Relationship of presenting part to mother's pelvis

O. Precipitation--Sudden expulsion of fetus without preparation for delivery

P. Presenting part--Part of fetus that is palpated through cervix at beginning of labor; presentation

Q. Prolapse of the umbilical cord--Premature expulsion of the cord during parturition, before delivery of fetus

R. Station--Relationship of presenting part to level of ischial spines

INFORMATION SHEET

S. Suture line--Line of junction or closure between bones, as in the skull

T. Uterine inertia--Diminution or cessation of uterine contractions during labor

U. Vernix caseosa--Cheesy deposit on skin of fetus

V. Vertex--Highest point of the skull; the crown

II. Signs and symptoms of labor

A. Lightening

(NOTE: Lightening may occur two to four weeks before term in primiparas; may not occur until after onset of labor in multiparas.)

B. Bloody show

C. Recurrent pains in back and/or abdomen

D. Urinary frequency

E. Rupture of membranes

F. Uterine contractions which gradually increase in frequency, intensity, and duration

III. Possible reasons for the onset of labor

(NOTE: The exact cause is unknown.)

A. Diminished placental function

B. Distended uterus causing pressure on nerve and muscle fibers

C. Pressure causing stretching of cervix which stimulates uterine contractions

D. Decreased uterine blood flow and hormone production causing irritation of the myometrium

IV. Functions of the pelvis and uterus during labor (Transparencies #1-#3)

A. Pelvis

(NOTE: The nurse need not know the exact pelvic measurements of each patient but should understand the importance of an adequate pelvis in the birth process.)

1. False

(NOTE: The false pelvis is located above the pelvic brim.)

a. Supports enlarging uterus during pregnancy

b. Helps direct fetal head into true pelvis

INFORMATION SHEET

2. True

   (NOTE: The true pelvis is located below the pelvic brim and is divided into the inlet or upper boundary, the cavity, and the outlet or lower boundary.)

   a. Articulations widen to accommodate fetus, particularly the skull

   b. Ligaments expand to allow fetus to pass through

B. Uterus (Transparency #1)

   1. Upper segment of thick and contractile muscles contracts rhythmically

   2. Lower segment of thin and passive muscles gradually stretches

   3. Contraction and stretching brings about dilatation and effacement of cervix (Transparencies #2 and #3)

V. Signs of true and false labor

   A. True labor

      1. Regular contractions that gradually intensify

      2. Evidence of bloody show

      3. Contractions increased by activity

      4. Descent of presenting part

      5. Abdominal pain sometimes accompanied by backache

      6. Discomfort not relieved by mild sedation

      7. Soft cervix

   B. False labor

      1. Irregular contractions that disappear upon lying down

         (NOTE: Many times these are Braxton-Hicks contractions.)

      2. No bloody show

      3. No change produced by activity

      4. Presenting part does not descend

      5. Discomfort mainly in abdomen

      6. Discomfort stops with medication

      7. Firm cervix

INFORMATION SHEET

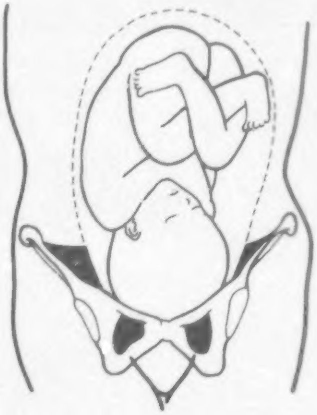
VI. Presentations and positions of fetus in relationship to the mother (Figures 1-8; Transparency #5)

(NOTE: The fetal skull bones are joined only by the membranes of the suture lines. Incomplete ossification of fetal cranium permits molding of the bones to adapt to the birth canal. Molding may be extensive, thus misshaping the head, but the head resumes its normal contour a few days after birth.)

A. Cephalic

(NOTE: The cephalic position indicates that any part of the head is presenting. The position of the infant's head is noted as it is delivered. The occipital bone is used as a reference point, and its position indicated on the chart. The position shown in Figure 1 is an R.O.P., or right occiput posterior.)

FIGURE 1



EXAMPLES:

FIGURE 2

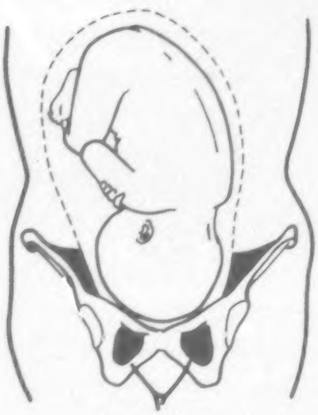


FIGURE 3

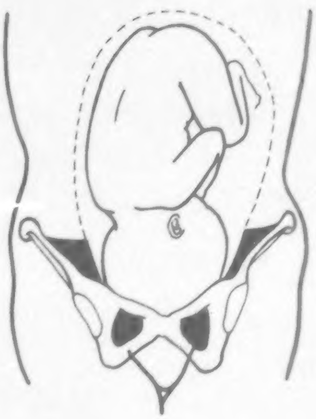
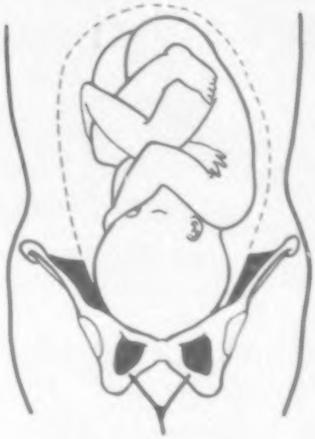


FIGURE 4

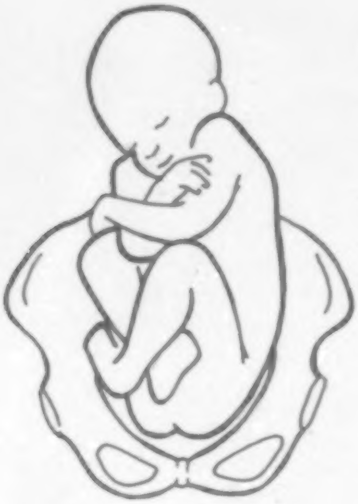


INFORMATION SHEET

B. Complete breech

(NOTE: In this position, the buttocks and feet present together.)

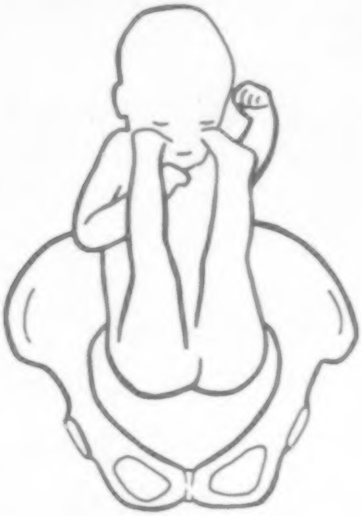
FIGURE 5



C. Frank breech

(NOTE: In this position, the buttocks present with legs extended and feet against the face.)

FIGURE 6

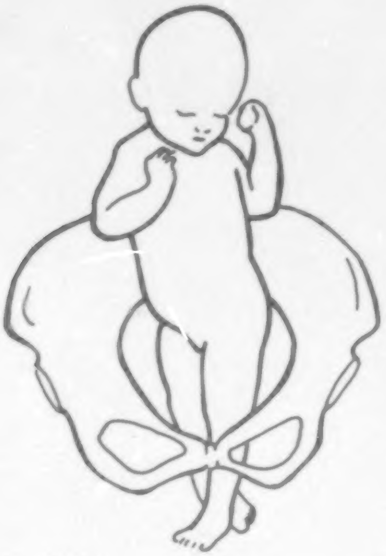


INFORMATION SHEET

D. Footling breech

(NOTE: In this position, one or both feet are presenting.)

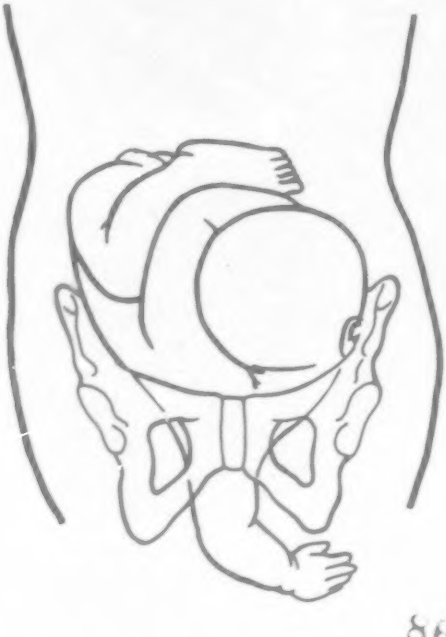
FIGURE 7



E. Shoulder presentation

(NOTE: In this position, the shoulder alone or shoulder and arm is presenting.)

FIGURE 8

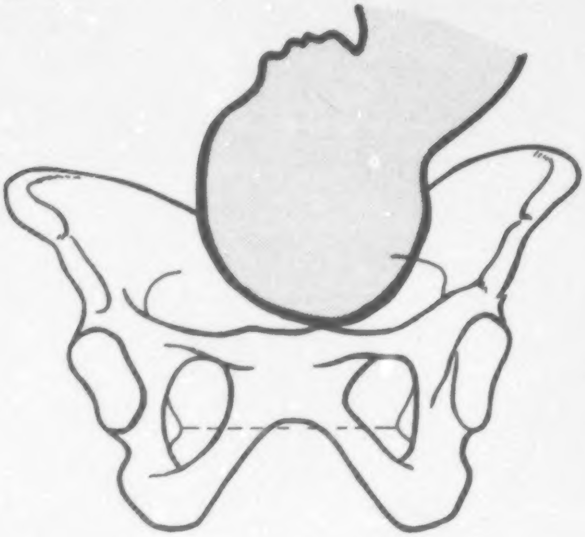


INFORMATION SHEET

VII. Stations of descent (Figures 9-10)

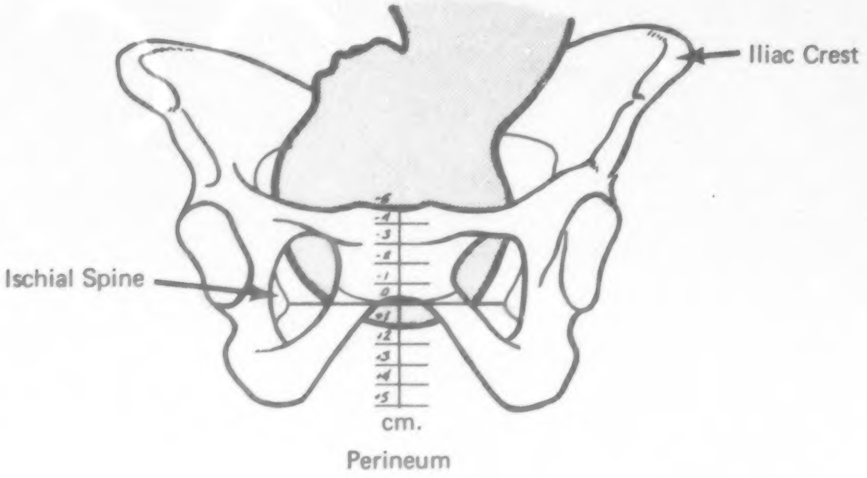
A. Floating--Presenting part freely movable above inlet

FIGURE 9



B. Dipping--Presenting part partially through inlet

FIGURE 10


Iliac Crest
Ischial Spine
-5
-4
-3
-2
-1
0
+1
+2
+3
+4
+5
cm.
Perineum

(NOTE: The progress through the birth canal is measured by station and indicated by centimeters as shown on the following chart.)

INFORMATION SHEET

Descent	Station
Head floating	-4
Head moving toward ischial spines	-3, -2, -1
Engagement (vertex level with ischial spines)	0
Progressing toward pelvic floor	+1, +2, +3
Vertex at perineum crowning	+4

C. Engaged--Largest diameter of presenting part through inlet

D. Flexion--Chin flexed on chest with occiput presenting

(NOTE: In this position, the head is presented in its smallest diameter to the birth canal and, therefore, makes a relatively easy descent.)

VIII. First stage of labor (Transparency #4)

(NOTE: This stage begins with the onset of regular, pronounced contractions and lasts until the cervix is completely effaced and dilated. The duration for primipara is usually eight to sixteen hours but may be shorter; for a multipara, two to ten hours.)

A. Characteristics of early phase

1. Contractions are slow, short, and rhythmic
2. Frequency is every five to twenty minutes
3. Duration is thirty to fifty seconds
4. Discomfort radiates from lumbar area to anterior abdomen
5. Cervix dilates to three cm

B. Characteristics of mid- or active phase

1. Contractions increase in frequency, duration, and intensity
2. Frequency is every two to four minutes
3. Duration is forty-five to sixty seconds
4. Cervix dilates to eight cm

C. Characteristics of transition or end of stage one

1. Contractions become longer and more intense

INFORMATION SHEET

2. Frequency is every one and one-half to three minutes

3. Duration is sixty to ninety seconds

4. Cervix completely dilates to ten cm

5. Urge to push occurs

D. Rupture of membranes

1. May occur any time during labor

2. Prolapse of umbilical cord may follow premature rupture

IX. Nursing responsibilities when admitting a patient in labor (Job Sheets #1-#3)

A. Identify patient and make her comfortable

B. Introduce yourself and explain hospital procedures and techniques

C. Check vital signs, including fetal heart rate

D. Notify doctor of admission; provide doctor with vital signs, fetal heart rate, and status of labor

E. Prepare patient as directed by physician

(NOTE: Preparation may or may not include an enema or vaginal prep.)

F. Obtain history on appropriate form

EXAMPLES: Medical history, obstetrical status, para number and gravida number, symptoms of labor including presence of show, rupture of membranes, character and duration of contractions, any allergies, mother's knowledge of childbirth, any special preparation, previous complications, presence of current family illness, time of last meal, plans for breast or bottle feeding, any physical problems or disabilities, and blood type and incompatibilities

G. Assist with physical examination, including assessment of obstetrical status

X. Nursing responsibilities during the first stage of labor (Assignment Sheet #1)

(NOTE: It is of extreme importance that aseptic technique is maintained to avoid introducing pathogens into the vaginal canal.)

A. Protect patient from physical harm

1. Assist patient in getting in and out of bed

2. Use side rails if patient is sedated

INFORMATION SHEET

B. Monitor progress and condition

  1. Take vital signs at prescribed intervals

  2. Determine frequency, intensity, and duration of contractions

  3. Observe amount and color of vaginal discharge

C. Check contour and size of abdomen

  1. Check fetal movements

  2. Check for bladder distention

     (NOTE: Offer bedpan if patient is restricted to bed, or take patient to bathroom if allowed.)

D. Provide food and fluids as prescribed

E. Provide for comfort

  1. Change position frequently

     (NOTE: When patient is in supine position, hypotension may result from pressure on the inferior vena cava. Assisting her to the lateral or Sims' position will relieve such pressure.)

  2. Ambulate if possible until membranes rupture

  3. Provide mouth care frequently

  4. Keep patient clean and dry

  5. Omit perineal pads during labor

F. Monitor closely after membranes rupture

   (NOTE: If the state of the membranes cannot be determined accurately, the nurse may check the pH of the vaginal drainage. Normal vaginal secretions are slightly acid, in the 4.5 to 5.5 range on the pH scale; amniotic fluid is basic, in the 7 to 7.5 range. A sterile applicator is inserted gently into the vaginal canal, withdrawn, and applied to Nitrazine paper. If the membranes are intact, the paper will turn yellow to olive green; if membranes are ruptured, the paper will turn blue green to deep blue.)

  1. Observe for amount of discharge

  2. Observe for bleeding

INFORMATION SHEET

3. Observe for meconium staining

   (NOTE: Meconium-stained amniotic fluid in the cephalic presentation may be considered a sign of fetal distress, evidenced by the reaction of the fetus to lack of oxygen. Such staining in a breech presentation is usually not considered significant. In either case, it should be reported to the physician.)

4. Observe for fetal heart distress

5. Observe for prolapsed cord

   (CAUTION: If cord is prolapsed, emergency techniques to ease cord compression should be taken as prolonged compression can cause CNS damage or death of infant.)

G. Administer medication as prescribed

H. Provide emotional support

EXAMPLES:

1. Encourage verbalization concerning preparation for labor and delivery, including patient's fears and feelings

2. Explain procedures and labor process

3. Stay with patient as much as possible; leave her only for very short periods of time

4. Permit support person or coach to remain with patient throughout her labor

   (NOTE: If coach is present, allow time for him or her to participate in providing emotional support.)

5. Provide physical support by touching the patient and massaging her back and abdomen as indicated to relieve distress

6. Assist with breathing exercises and relaxation techniques to help reduce pain and tension

7. Reassure and encourage patient and coach as labor progresses

8. Provide privacy and avoid unnecessary exposure

I. Monitor fetal heart

1. Explain to patient the use of the monitor system and equipment

2. Check frequently to assess any changes in fetal status

   (NOTE: The normal rate is 120 to 160 beats per minute. The rate slows during contraction and increases between contractions.)

INFORMATION SHEET

3. Report immediately if rate is below 100 or above 160; abnormal rate indicates fetal distress

4. Determine location of fetal heart

   (NOTE: Fetal heart tone will move from side to side and down as fetus rotates and descends.)

   EXAMPLES: Cephalic presentation may be heard in lower abdominal quadrants; breech presentation may be heard in upper abdominal quadrants.

XI. Maternal danger signals (Job Sheet #4)

A. Elevation of temperature with or without chills

B. Change in pulse rate and deviation in blood pressure

C. Change in tone and contour of uterus which may indicate impending rupture

D. Sudden hard contraction followed by cessation of contractions, acute abdominal pain, and signs of shock

(NOTE: These are symptoms of rupture of the uterus.)

E. Excessive vomiting

F. Hyperventilation which disrupts normal oxygen and carbon dioxide exchange

G. Supine hypotension syndrome which produces symptoms similar to shock and may decrease fetal heart rate

H. Pallor, cyanosis, or signs of cardiac distress

I. Vaginal bleeding

J. Headache, dizziness, epigastric pain, spots before the eyes, edema of hands or face

K. Convulsions

XII. Fetal danger signs

A. Deviation in fetal heart rate

B. Passage of meconium in cephalic presentation

(NOTE: This is more common in breech presentations.)

C. Fetal hyperactivity which indicates diminished oxygen supply

D. Prolapse of umbilical cord

INFORMATION SHEET

XIII. Facts related to complications of labor

COMPLICATION	CHARACTERISTICS	CAUSES	TREATMENT
Primary inertia	Inefficient contractions persist from onset of labor; latent phase of first stage is prolonged	Muscle weakness and/or nerve defects; overdistention of uterus due to multiple births; emotional stress; rigid, unaffected cervix; too early sedation (usually in an older primipara)	Rest, sedation; oxytocics after rest
Secondary inertia	Occurs during mid- or active phase of stage one; contractions are weak, but coordinated and not too painful	Overdistention of uterus; distention of bladder or bowel; weak abdominal muscles; emotional stress; cervical rigidity; fatigue; pelvic disproportion; poor position of fetus	Oxytocics; amniotomy if indicated; rest; C-section may be needed if fetus is in poor position or if there is pelvic disproportion
Pathological retraction ring or Bandl's ring (NOTE: This may indicate impending rupture of the uterus.)	Overstretching of lower segment of uterus with thickening of muscles in upper segments; strong contractions with bearing down but no progress; rapid pulse and panting respiration; extreme pain	Improper use of sedatives; disproportion of pelvis or fetus; abnormal presentation; prolonged labor	Notify doctor; may indicate need for C-section

INFORMATION SHEET

COMPLICATION	CHARACTERISTICS	CAUSES	TREATMENT
Abnormal position of fetus	Contractions felt in the back, causing almost continuous back pain; early rupture of membranes; frequent and irregular contractions; presenting part remains high during labor	Premature labor; short umbilical cord; disproportion of pelvis; placenta placed low	Manual rotation of fetus, back massage; may indicate need for forceps or C-section delivery
Prolapsed cord	Umbilical cord visible or protruding from vagina or through os	Premature rupture of membranes before presenting part begins descent; long cord; low-placed placenta; hydramnios; premature labor	Bed rest after rupture of membranes; Trendelenberg position; application of sterile moist dressings to protect cord; immediate delivery or C-section if indicated
Precipitate labor and delivery	Labor short, progresses rapidly; occurs usually in multiparas	Relaxed cervix; small fetus; multiple birth	Prevent by close monitoring of patient; assist with birth

INFORMATION SHEET

XIV. Indications and contraindications for induction of labor

(NOTE: The patient whose labor is being induced must be very carefully monitored for vital signs, fetal heart tones, and contractions.)

A. Indications

1. Postmaturity
2. Diabetic mother
3. Preeclampsia
4. Uterine inertia
5. Ruptured membranes for more than twelve to twenty-four hours

   (NOTE: This indication may vary depending on the physician.)

B. Contraindications

1. Previous cesarean section
2. Multiple gestations
3. Cephalopelvic disproportion
4. Abnormal presentation
5. Overdistention of uterus
6. Fetal distress

XV. Terms associated with delivery and their definitions

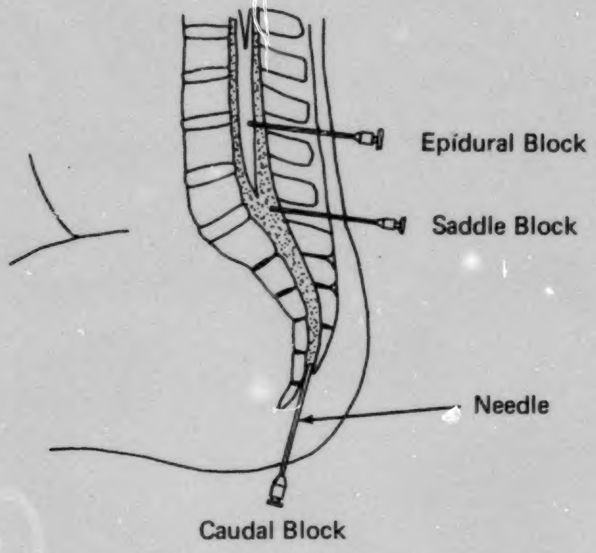
A. Caudal block--Anesthesia induced by intermittent or continuous injection of an anesthetic into sacral canal (Figure 11)

B. Dura mater--Outer membrane covering the spinal cord

INFORMATION SHEET

C. Epidural anesthesia--Injection of anesthesia into space outside dura mater in lumbar region (Figure 11)

FIGURE 11



D. Episiotomy--Medial or lateral incision of perineum to avoid laceration

E. Laceration--Tear or wound made by tearing

F. Paracervical block--Injection of anesthesia through vagina into area around cervix

G. Pudendal block--Injection of local anesthesia into pudendal nerve on both sides of perineum near ischial spine

H. Saddle block--Sensory loss in saddle area which occurs in a type of caudal anesthesia (Figure 11)

XVI. Advantages and disadvantages of types of anesthesia used during delivery

A. Inhalation

1. Advantages

a. Causes loss of consciousness and complete relaxation during procedure

b. May be used in complicated delivery

INFORMATION SHEET

2. Disadvantages
    a. May depress respirations of mother and/or neonate
    b. Frequently causes vomiting with possibility of aspiration
    c. May impair uterine contractions
    d. Requires an anesthetist for administration

B. Regional

(NOTE: Regional anesthesia includes spinal, saddle, caudal, paracervical, pudendal, perineal, and epidural.)

1. Advantages
    a. Mother awake throughout the procedure
    b. Safer for neonate
2. Disadvantages
    a. Patient may have difficulty bearing down after anesthesia
    b. Blood pressure and/or respirations may be affected in higher level administration
    c. Voiding may be difficult in postpartum period
    d. Repeated injections may be necessary
    e. Patient unable to control lower extremities

C. Hypnosis

(NOTE: Patient must begin preparation in third month of pregnancy. Exercises in relaxation and techniques of breathing and muscle use are practiced with help of therapist.)

1. Advantages
    a. Requires less medication
    b. Patient is awake and cooperative during birth process
    c. Hypnotic and posthypnotic suggestions help alleviate discomfort
2. Disadvantages
    a. Requires much advance preparation and planning
    b. Patient is in a suggestive state, so great care is needed in what is said in patient's hearing

INFORMATION SHEET

XVII. Procedures necessary to prepare delivery room

(NOTE: Prepare delivery room using surgical aseptic techniques before the patient is transferred. Wear a cap or hair cover, mask, and nonconducting shoes while preparing equipment.)

A. Determine what equipment will be needed and prepare as indicated

EXAMPLE: Gloves for physician and assistant, type of anesthesia, any special instruments the physician prefers, sterile drapes, gowns

B. Open and arrange sterile packs of equipment, then cover with sterile cover

C. Prepare incubator or Isolette

XVIII. Characteristics of the second stage of labor (Transparencies #6 and #7)

(NOTE: This stage begins at the complete dilatation of the cervix and lasts through the delivery of the infant. This stage in the primipara usually lasts from thirty minutes to three hours, and in the multipara from five to thirty minutes.)

A. Increased bloody show

B. Pressure on rectum, causing patient to feel desire to defecate

C. Spontaneous bearing-down reflex

D. Contractions almost continuous

E. Perineum begins to bulge (Transparency #7)

F. Crowning

XIX. Nursing responsibilities during transfer and preparation of patient in delivery room

A. Transfer patient at beginning of second stage, usually when physician or charge nurse determines that delivery is imminent

(NOTE: A multipara may be transferred before she begins to bear down or have bulging of the perineum. A primipara may not deliver for as long as one hour after dilatation is complete; therefore, she will be more comfortable in the labor room.)

B. Encourage patient not to push during transfer and positioning on delivery table

INFORMATION SHEET

C. Secure patient's wrists to prevent contamination of sterile field

(NOTE: This step may be omitted depending on hospital policy, type of delivery, and other factors.)

D. Place patient's legs in stirrups by raising both legs at the same time and adjusting stirrups to fit patient properly; cover as needed

(NOTE: Because of strain on ligaments stirrups may not be used, depending on hospital policy or physician's delivery technique.)

E. Position delivery table as needed

F. Prepare abdomen, thighs, and entire perineal area as indicated by physician or hospital policy

G. Place sterile drape under buttocks

(NOTE: Legs and abdomen are draped with sterile drapes by the physician.)

H. Provide a stool for physician; place sterile supply table conveniently, adjust lights, and secure any additional supplies

I. Encourage and assist patient as needed unless patient is given a general anesthetic

XX. Nursing responsibilities during the second stage of labor (Assignment Sheet #1)

A. Coach patient in proper technique of exerting downward pressure during contractions and relaxing as much as possible between contractions

B. Check maternal pulse and blood pressure frequently

C. Continue monitoring contractions and fetal heart

D. Provide for comfort as indicated

E. Provide emotional support and encouragement

F. Observe for elimination and/or bladder distention

G. Note and report any unusual symptoms

H. Give medications as prescribed

I. Provide mouth care and personal care as indicated

J. Maintain patient safety as necessary

INFORMATION SHEET

XXI. Procedures used during delivery of infant (Transparencies #8 and #9)

(NOTE: The following procedures are those used in a normal delivery of a healthy, viable infant. Procedures used in a difficult delivery or one that produces a deformed or nonviable infant may be different.)

A. Physician examines patient vaginally to determine position of infant

B. Patient may be catheterized to ensure an empty bladder

C. Physician may perform an episiotomy

D. Forceps may be used to assist the delivery

E. Perineum is supported to prevent laceration

F. Physician checks after head is delivered to see that umbilical cord is not wrapped around infant's neck

G. Physician uses a rubber syringe to aspirate mucus and fluid from infant's mouth as head rotates

H. Physician continues delivery, guiding infant as needed

I. After delivery, physician lowers infant's head to clear airway, aspirates mouth and nose, places infant on mother's abdomen, and clamps and cuts cord

J. Infant is given to nurse for further care

XXII. Nursing responsibilities for immediate care of the newborn (Transparency #10)

A. Establish and maintain a patent airway by using wipe or suction to remove mucus and secretions from infant's nose and mouth

B. Stimulate respiration as needed, administer oxygen as needed, or use further resuscitation measures as needed

C. Position infant to prevent aspiration

D. Provide for warmth by drying; cover head

E. Determine Apgar score (Transparency #10)

F. Identify properly by footprinting infant and thumbprinting mother; place identifying bands on infant and mother while still in delivery room

G. Provide prophylactic treatment for eyes

(NOTE: An ophthalmic solution of penicillin, an antibiotic, or one percent silver nitrate may be used.)

H. Administer injection of vitamin K if prescribed

INFORMATION SHEET

XXIII. Characteristics of the third stage of labor (Transparency #11)

(NOTE: This stage begins after delivery of infant and lasts through delivery of placenta, usually five to ten minutes.)

A. First phase

1. Gush of blood from vagina is seen
2. Umbilical cord begins to descend
3. Fundus becomes firm
4. Spontaneous bearing-down occurs

B. Delivery of placenta

1. Uterus continues to contract causing separation of placenta from uterine wall; uterus assumes globular shape
2. Placenta is expelled or delivered by physician

   (NOTE: This process can be observed as an apparent lengthening of the umbilical cord. When the maternal surface of the placenta appears first, this is known as a Duncan mechanism or *Dirty Duncan.* When the fetal surface appears first, this is known as a Schultz mechanism or *Shiny Schultz.* When all or a portion of the placenta remains in utero, this is known as *retained.* After expulsion of placenta, uterus should be felt as a firm mass at the level of the umbilicus.)

3. Physician may order administration of an oxytocic preparation such as Pitocin

   (NOTE: This may be done before and/or after the expulsion of the placenta.)

4. Placenta is checked carefully to be sure that it is intact
5. Physician inspects birth canal for any lacerations, and sutures episiotomy and lacerations as required
6. Injection of medication may be given at this time to aid in suppressing lactation if patient has opted not to breast-feed

XXIV. Characteristics of the fourth stage of labor

(NOTE: This stage begins from the completion of delivery of placenta and lasts until postpartum condition is stabilized, usually one to two hours.)

A. Recovery from anesthesia if given

B. Stabilization of vital signs, bleeding, and fundal muscle tone

C. Occasional, sudden, severe chill due to sudden change in intra-abdominal pressure

INFORMATION SHEET

XXV. Nursing responsibilities for care of mother during the fourth stage of labor (Assignment Sheet #1)

(NOTE: Labor and delivery are physically and emotionally exhausting; therefore, the patient may need much assistance. This is a crucial stage of patient care.)

A. Cleanse patient as necessary and dress in clean gown

B. Apply perineal pads from front to back and secure

(NOTE: An ice pack may be applied per physician's orders to aid in reduction of swelling.)

C. Cover patient and take to recovery room or to unit via stretcher

D. Monitor vital signs and intravenous administrations frequently

E. Palpate fundus frequently for firmness and location; fundus should remain firm and at or below the level of the umbilicus

F. If fundus relaxes or becomes boggy, massage until firm

(NOTE: This procedure is uncomfortable for the patient, but is *very* important.)

G. Call physician or charge nurse immediately if massage fails to firm fundus

H. Observe vaginal bleeding and monitor patient for signs of shock

I. Observe for elimination and/or bladder distention

J. Note and report any unusual symptoms

K. Give medications as prescribed

L. Provide mouth care and personal care as indicated

M. Maintain patient safety as necessary

N. Provide emotional support as indicated by reducing disturbances to provide rest, permitting patient full expression of her feelings, and allowing her to see her baby and family when she is ready

XXVI. Cesarean section

A. Cesarean sections may be done on an elective or emergency basis, depending on the patient's history and condition

B. Most frequent cause for this procedure is dystocia due to disproportion of fetus to pelvis

C. Classical section is performed with the incision in the midline and can be performed very quickly in emergency situations

INFORMATION SHEET

D. Low cervical section is made with of a low horizontal incision line and is used whenever possible; allows wound to heal more easily, and reduces chances of hemorrhage or infection

XXVII. Nursing responsibilities for patient having cesarean section

A. Preoperative

1. Monitor fetal heart and vital signs of patient

2. Prepare abdomen according to physician's preference and/or hospital procedure

   (NOTE: Usually the abdomen is prepared for surgery from the xiphoid tip to the pubic area and from side to side.)

3. Provide additional care as indicated

   (NOTE: In elective surgery, care is provided as for other abdominal surgery; in emergency surgery, care is provided according to patient's condition and needs.)

4. Avoid enemas, sedatives, and narcotics

B. Postoperative

1. Provide care as for other abdominal surgery

2. Observe for vaginal bleeding

3. Check fundus frequently; massage until firm

   (NOTE: Remind patient that although this procedure is uncomfortable, it is absolutely necessary.)

4. Provide aseptic breast and perineal care

5. Assist with manual expression of breast milk until patient is able to breast-feed

XXVIII. Steps to take when an emergency delivery is performed

(NOTE: The nurse should know location of emergency delivery pack, obtain assistance if possible, and remain with the mother and infant.)

A. Provide as much asepsis as possible

B. Allow baby to deliver, providing support to mother's perineum, and baby's head and body while emerging

C. Check to see that cord is not around infant's neck after head is delivered

D. Clear airway and stimulate respirations immediately after infant is born

INFORMATION SHEET

E. Keep infant warm by placing on mother's abdomen and covering

F. Clamp cord with two hemostats, or tie in two places with tape or ribbon, approximately one inch apart

(NOTE: Do not use string or thread to tie cord because it may cut through the cord.)

G. Cut cord with sterile scissors after pulsation ceases

(NOTE: If sterile scissors are not available, it will not harm the baby to leave the cord uncut after it is tied.)

H. Wait for placenta to emerge by itself; do not pull on cord

I. Massage uterus to keep it firm after placenta is expelled

(NOTE: Placing infant to mother's breast aids uterine contraction.)

J. Clean mother and apply perineal pads

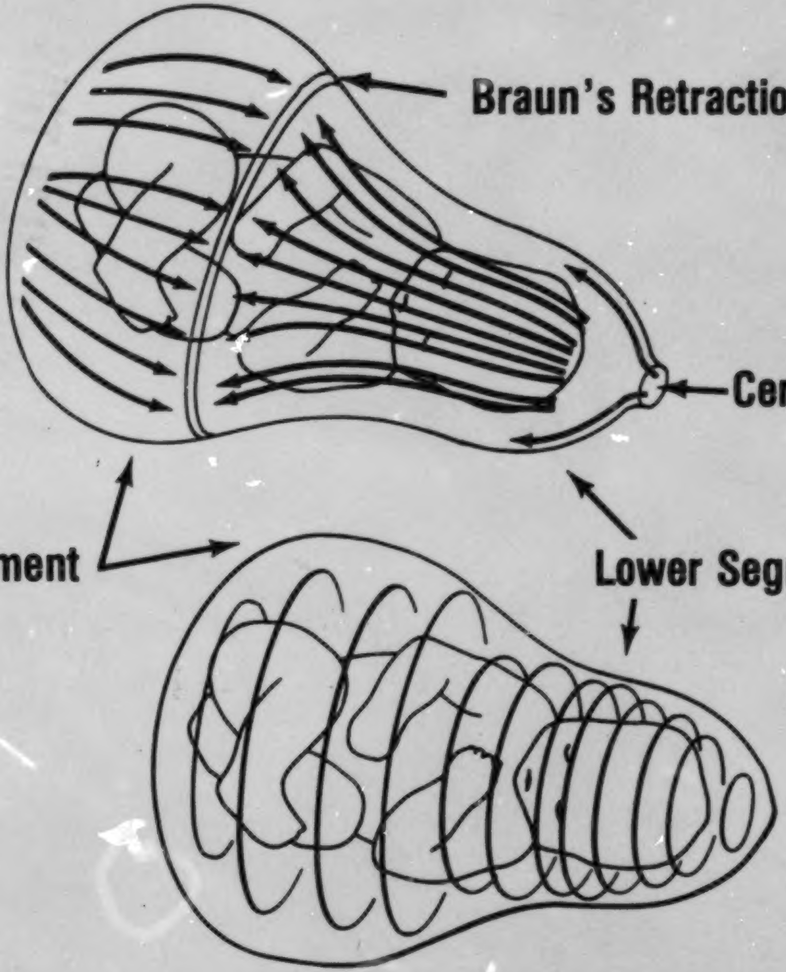
(NOTE: When proper equipment is not available, draw patient's legs together to minimize bleeding and chance of infection.)

K. Keep mother and infant warm

L. Note on patient's record and report when a delivery is unsterile

(NOTE: Danger of infection is greater in an unsterile birth than in a sterile birth. Precautions will be necessary to protect the mother and infant and others with whom they may be in contact.)

Musculature of the Uterus



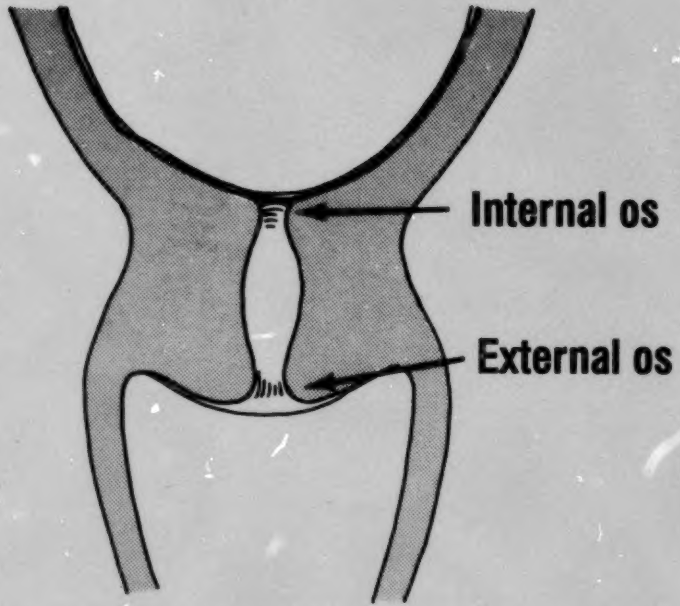
Braun's Retraction Ring

Cervix

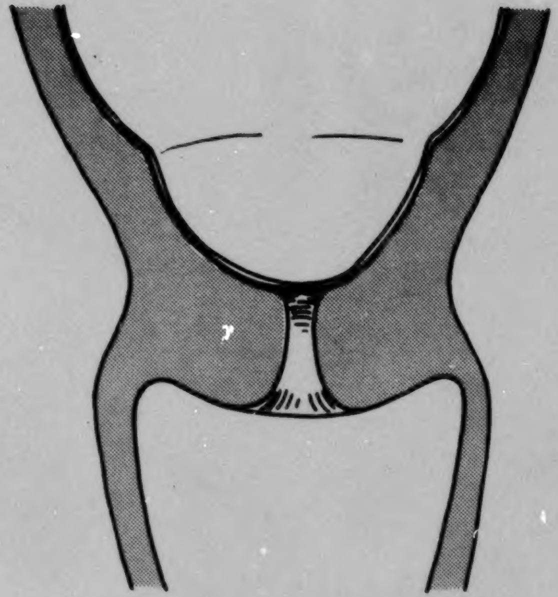
Upper Segment

Lower Segment

Before Labor and Early Effacement


Internal os
External os

Before Labor
No Effacement or Dilatation

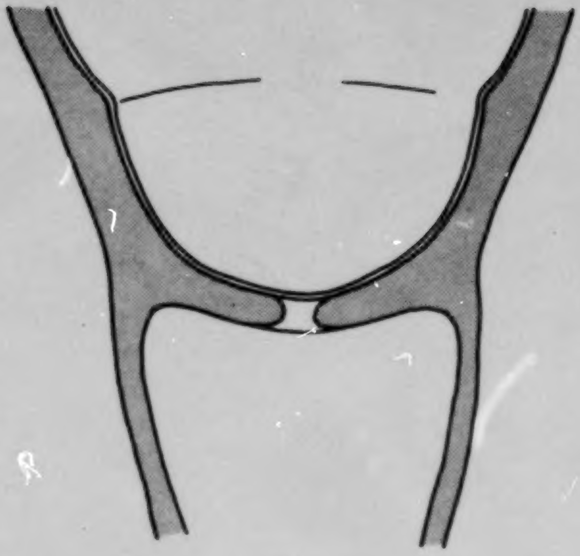


Early Effacement
No Dilatation

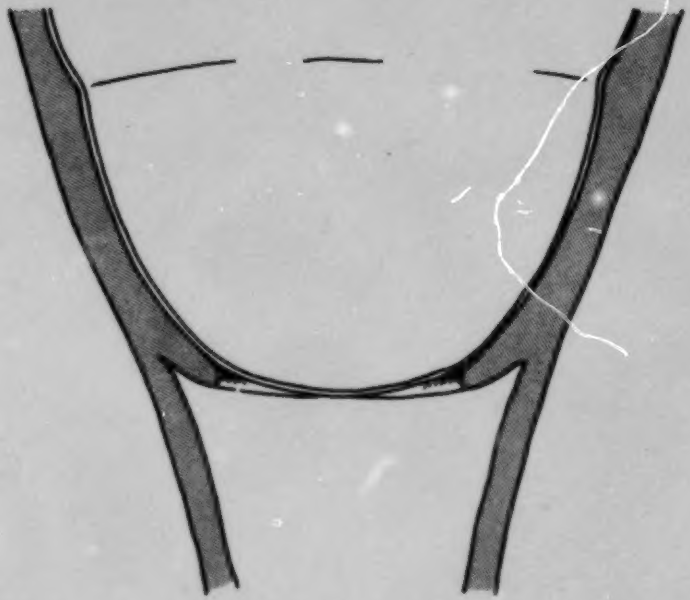
TM #2

PN II - 147-C

Complete Effacement and Complete Dilatation

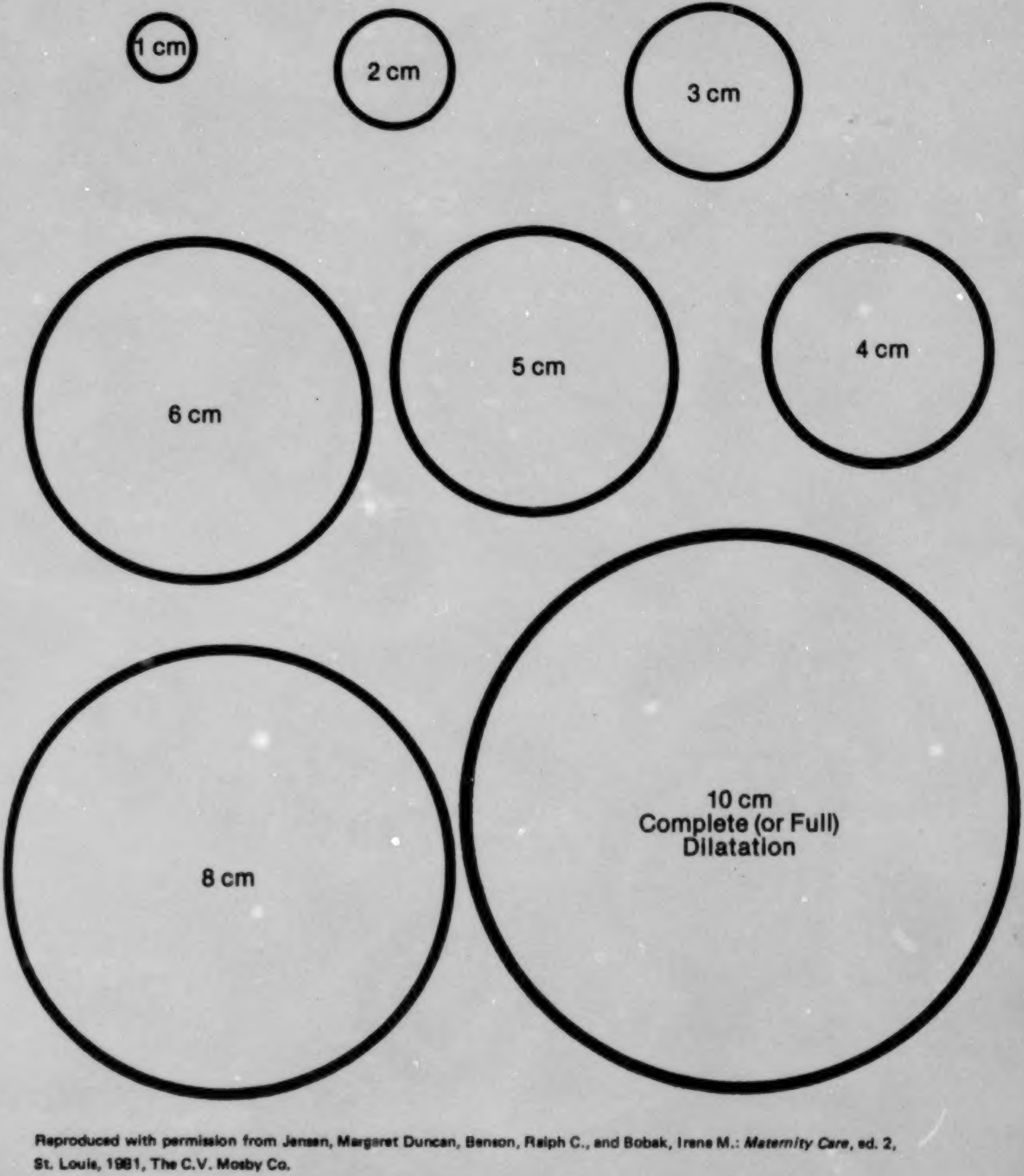


Complete Effacement
No Dilatation



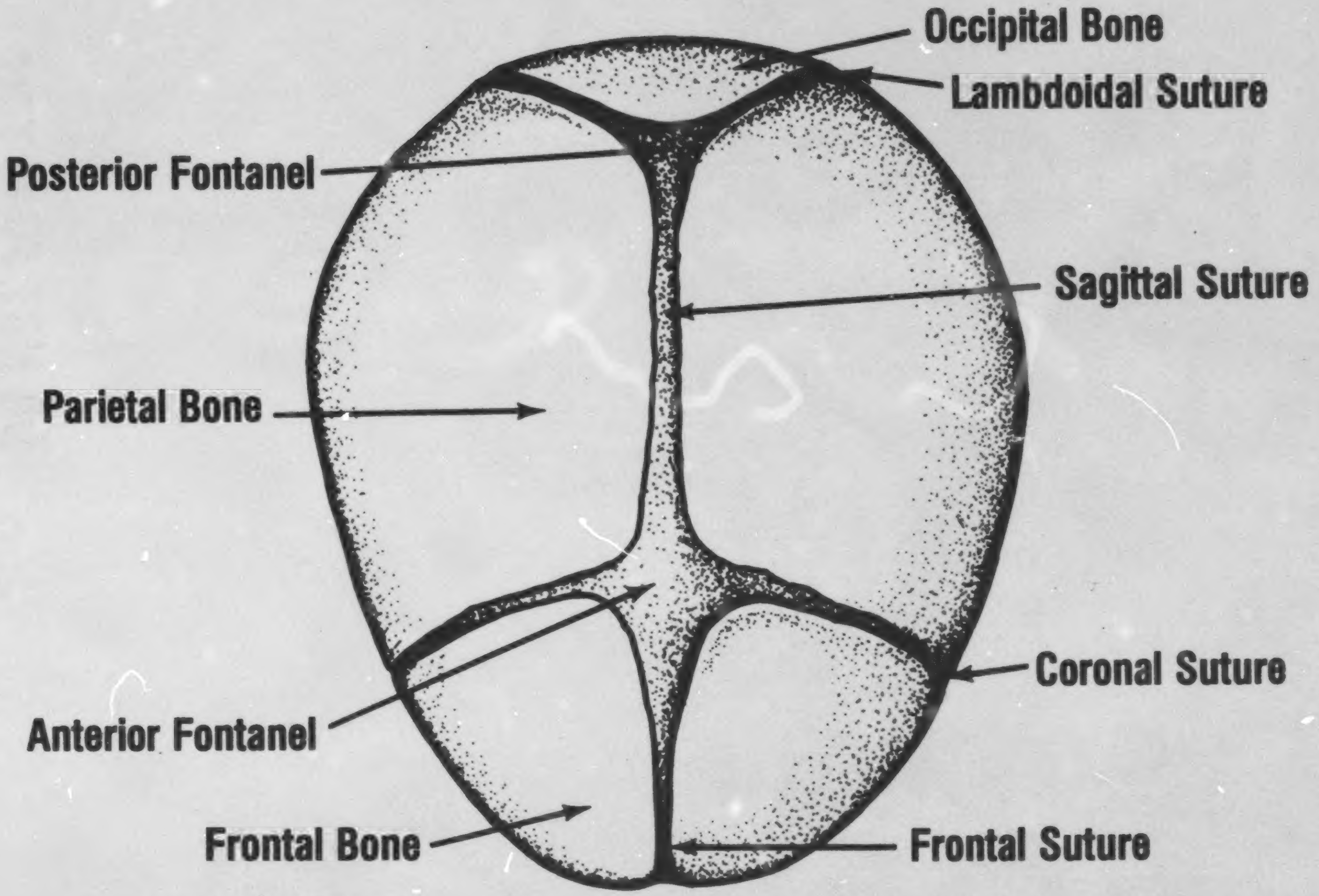
Complete Dilatation

Cervical Dilatation


1 cm
2 cm
3 cm
6 cm
5 cm
4 cm
8 cm
10 cm
Complete (or Full)
Dilatation

Reproduced with permission from Jensen, Margaret Duncan, Benson, Ralph C., and Bobak, Irene M.: *Maternity Care*, ed. 2, St. Louis, 1981, The C.V. Mosby Co.

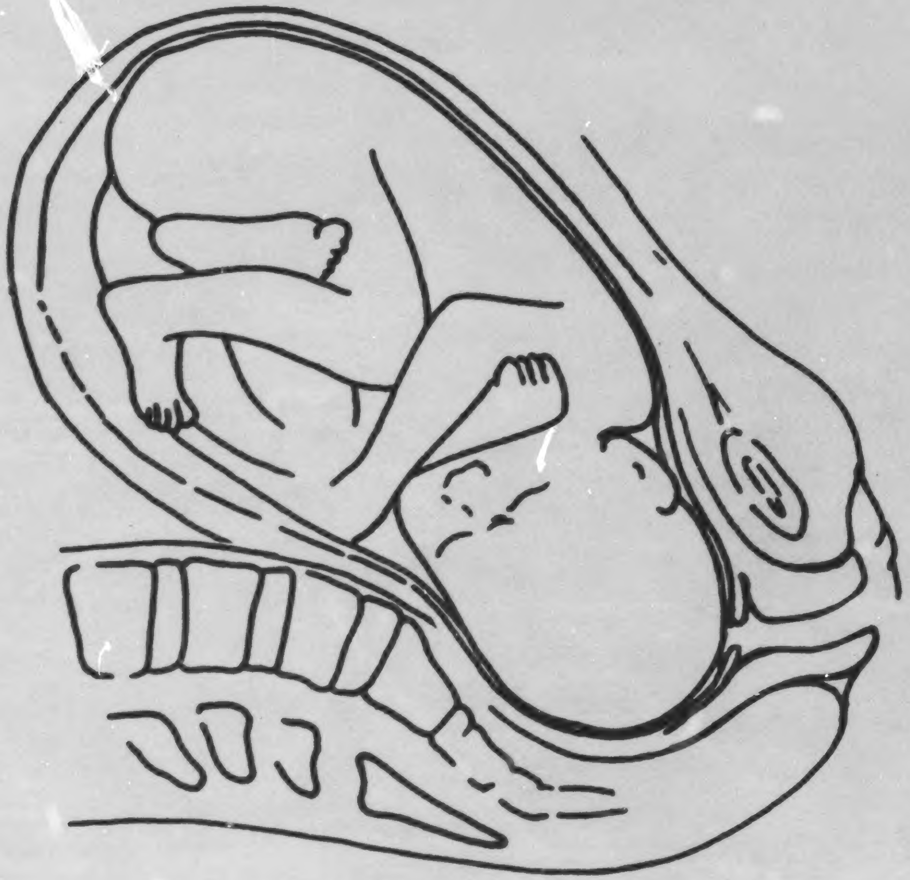
Fetal Skull


Occipital Bone
Lambdoidal Suture
Posterior Fontanel
Sagittal Suture
Parietal Bone
Coronal Suture
Anterior Fontanel
Frontal Bone
Frontal Suture

TM #5

PN II - 153-C

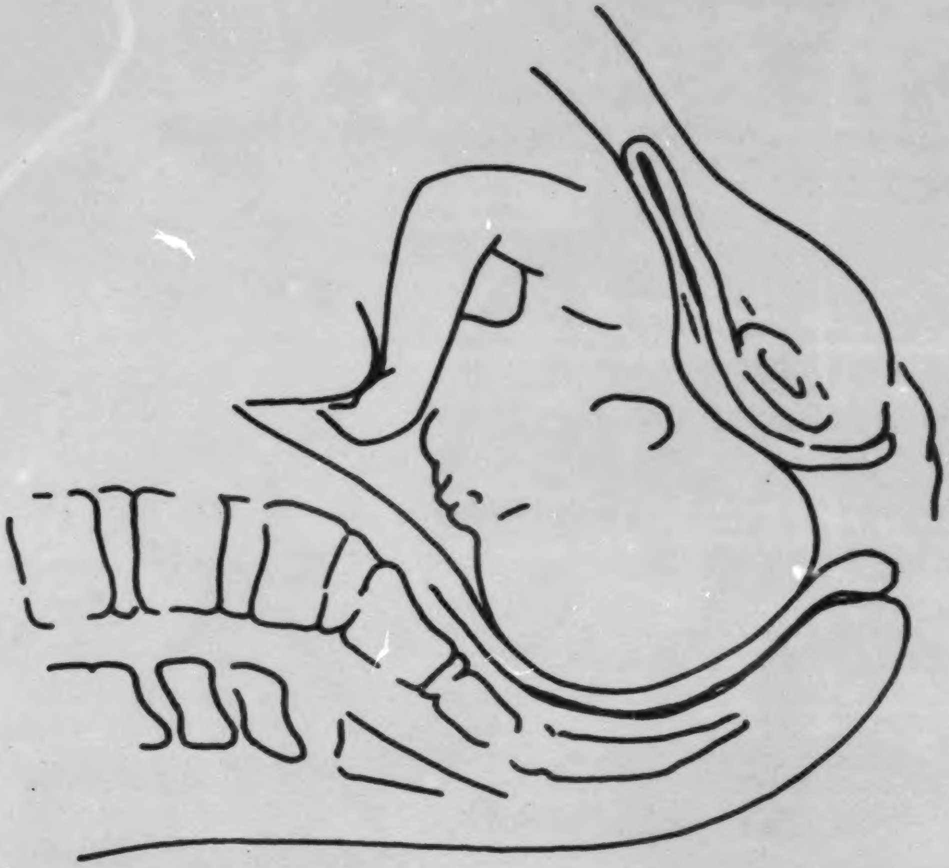
Engagement and Descent



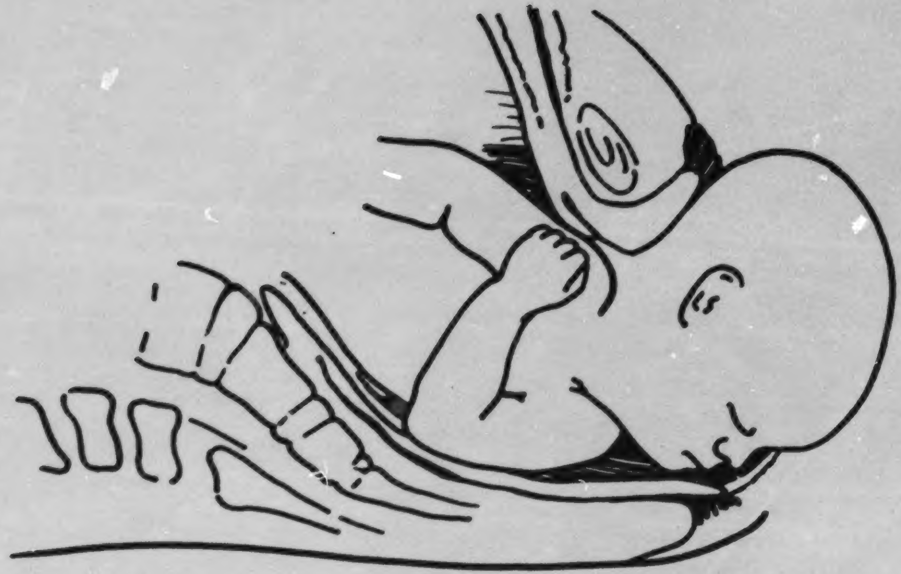
TM #6

PN II - 155-C

Beginning Extension



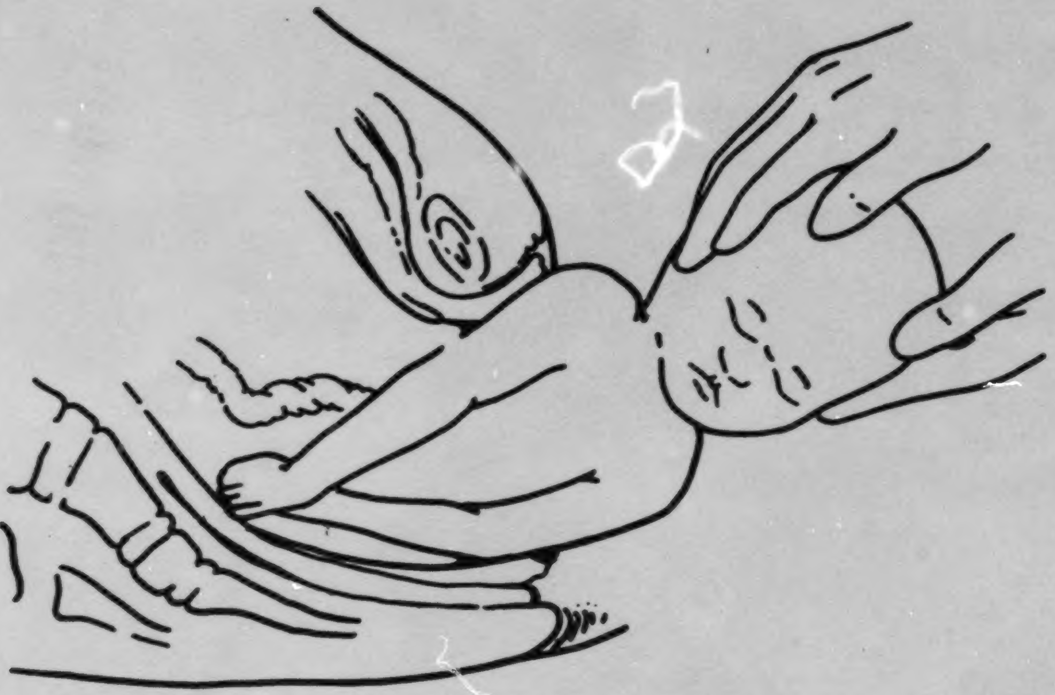
Complete Extension



TM #8

PN II - 159-C

External Rotation



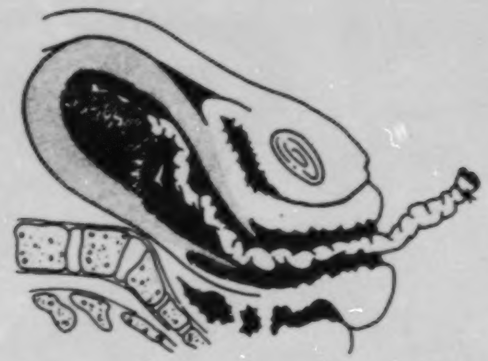
TM #9

PN II - 161-C

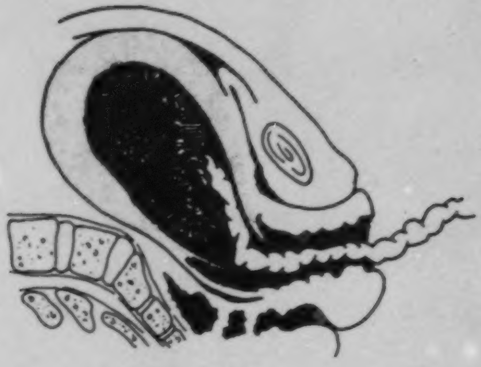
Apgar Scoring Chart

Sign	0	1	2
Heart Rate	Absent	Slow (below 100)	Over 100
Respiratory effort	Absent	Slow, irregular	Good, crying
Muscle tone	Flaccid	Some flexion of extremities	Active motion
Reflex irritability			
1. Response to slap on sole of foot	No response	Grimace	Cry, withdrawal of foot
2. Response to catheter in nostril (tested after oropharynx is clear)	No response	Grimace	Cough or sneeze
Color	Blue, pale	Body pink, extremities blue	Completely pink

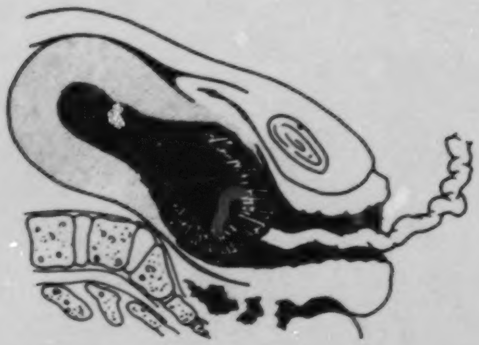
Delivery of Placenta (Third Stage of Labor)



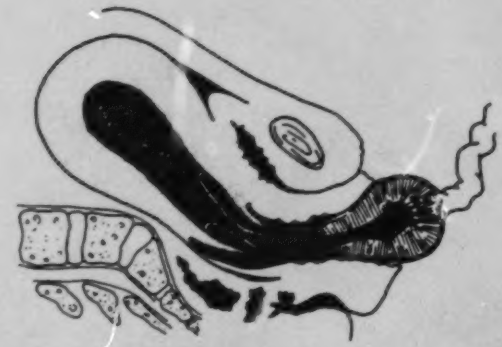
Placenta Begins Separation



Placenta Completes Separation



Placenta Enters Vagina, Cord Lengthens



Placenta Expelled

Reproduced with permission from Jensen, Margaret Duncan, Benson, Ralph C., and Bobak, Irene M.: *Maternity Care*, ed. 2, St. Louis, 1981, The C.V. Mosby Co.

CARE OF THE PATIENT IN LABOR AND DELIVERY
UNIT III

ASSIGNMENT SHEET #1--COMPLETE AN OBSTETRICAL CARE STUDY

NAME ______________________ SCORE ____________

To provide nursing care for the patient admitted to the obstetrical unit for labor and delivery, it is necessary to assess the patient's labor status and prepare her for the stages of labor and delivery.

This assignment sheet presents a patient to be admitted to the unit for labor and delivery. Complete the questions following the information given to you concerning the patient's background. Hand in to instructor for evaluation.

Patient to be admitted: Mrs. Susan Hoffman, married, with two living children, ages two and five. This is her fourth pregnancy, with one aborted pregnancy.

A. What questions will you ask Mrs. Hoffman to determine the approximate status of her labor?

B. Describe the admission procedure for maternity patients in your institution.

C. How does the admission of a maternity patient differ from the admission of other adult patients?

ASSIGNMENT SHEET #1

D. How would you expect Mrs. Hoffman's labor to differ from that of a primipara?

E. You are assigned to care for Mrs. Hoffman during labor.

1. List measures you would use to promote physical comfort during the first stage of labor.

2. List observations to be made during the first stage and explain reasons for the frequency of the observations.

3. What would you do to provide emotional support?

F. Mrs. Hoffman's membranes rupture after forty-five minutes of labor. List your actions in order of importance.

ASSIGNMENT SHEET #1

G. Give an example of the record you would keep of the contractions.

____

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____

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H. When the vital signs were taken at the time of admission, the fetal heart rate was 140. A short time after the membranes rupture, the fetal heart rate is 120; the next time you check, it has dropped to 112. What action will you take?

____

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I. Mrs. Hoffman's labor progresses satisfactorily.

1. When she is ready to be moved to the delivery room, what signs will you observe?

   ____

   ____

   ____

   ____

2. Describe the procedure for moving her to the delivery room.

   ____

   ____

   ____

   ____

ASSIGNMENT SHEET #1

3. What are your responsibilities after Mrs. Hoffman is moved to the delivery room? When she is ready to return to her room or the recovery room?

CARE OF THE PATIENT IN LABOR AND DELIVERY
UNIT III

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

CARE OF THE PATIENT IN LABOR AND DELIVERY
UNIT III

JOB SHEET #1--PERFORM A PERINEAL PREP

(NOTE: Many physicians are opting not to do a complete perineal prep. Check with orders to see what type of prep has been ordered.)

I. Equipment

   A. Prep tray

   B. Adequate light

II. Procedure

   A. Assemble equipment

   B. Wash hands

   C. Identify patient and explain procedure

   D. Provide privacy

   E. Place bed protector under buttocks

   F. Replace top covers with drape or bath blanket

   G. Position patient in dorsal recumbant position

   H. Begin shaving

      1. Lather vulva with soap solution using gauze

      2. Begin shaving at top of pubic area

         a. Use short, downward strokes

            (NOTE: Use downward strokes from pubes to rectum when shaving, cleaning, or drying. Use care when shaving around moles or other skin elevations.)

         b. Exert slight tension with other hand along and above razor strokes

         c. Rinse razor as needed in basin of water

      3. Cleanse the entire area with warm water after shaving

      4. Shave anal area

         a. Place patient in Sims' position

         b. Lather anal area

JOB SHEET #1

        c. Shave around anus, using short strokes
        d. Cleanse anal area with warm water and dry

I. Remove bed protector; replace with a dry one

J. Remove drape and replace top covers

K. Provide for patient's comfort

L. Clean equipment and return to proper place

M. Wash hands

N. Record and report procedure

JOB SHEET #1

III. Checklist for performing a perineal prep

		Performed Well	Needs Improvement
A.	Assembled equipment and washed hands	☐	☐
B.	Identified patient, explained procedure, and provided for privacy	☐	☐
C.	Placed bed protector under buttocks and replaced top covers with drape or bath blanket	☐	☐
D.	Positioned patient in dorsal recumbent position	☐	☐
E.	Began shaving process by lathering vulva and used short downward strokes to shave vulva	☐	☐
F.	Cleansed entire area with warm water after shaving	☐	☐
G.	Removed bed protector and replaced with dry one	☐	☐
H.	Removed drape and replaced top covers; provided for patient's comfort	☐	☐
I.	Cleaned equipment and returned to proper place	☐	☐
J.	Washed hands, recorded and reported procedure	☐	☐

Comments:

CARE OF THE PATIENT IN LABOR AND DELIVERY
UNIT III

JOB SHEET #2--TIME UTERINE CONTRACTIONS

I. Equipment

- A. Watch or clock with second hand
- B. Pad of paper
- C. Pen

II. Procedure

- A. Wash hands

  (NOTE: Use warm water so your hands are not too cold.)

- B. Identify patient and explain procedure
- C. Provide privacy
- D. Place hand lightly on fundus, just above the umbilicus

  (NOTE: The muscular contractions are strongest in the fundus.)

- E. Note the time when uterus becomes firm and pushes up against hand
- F. Note how long fundus stays firm

  (NOTE: This is the duration of one contraction.)

- G. Note time when uterus becomes firm again

  (NOTE: From beginning of one contraction to beginning of the next determines frequency.)

- H. Continue checking contractions, noting duration of contractions and relaxation periods between
- I. Record contractions

  EXAMPLES: "Contraction 6 minutes for 35 seconds, mild in intensity" or "Contractions becoming harder, q̄ 4 minutes for 45 seconds"

JOB SHEET #2

III. Checklist for timing uterine contractions

		Performed Well	Needs Improvement
A.	Washed hands, identified patient, explained procedure, and provided privacy	☐	☐
B.	Placed hand gently on fundus, just above umbilicus; noted time when uterus became firm and pushed up against the hand	☐	☐
C.	Noted how long the fundus stayed firm; noted time when uterus became firm again	☐	☐
D.	Continued checking contractions, noting duration of contractions and relaxation periods between	☐	☐
E.	Recorded contractions accurately	☐	☐

Comments: ____

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CARE OF THE PATIENT IN LABOR AND DELIVERY
UNIT III

JOB SHEET #3--MONITOR FETAL HEART RATE

I. Equipment

- A. Fetoscope or stethoscope
- B. Watch with second hand
- C. Pad of paper
- D. Pen

II. Procedure

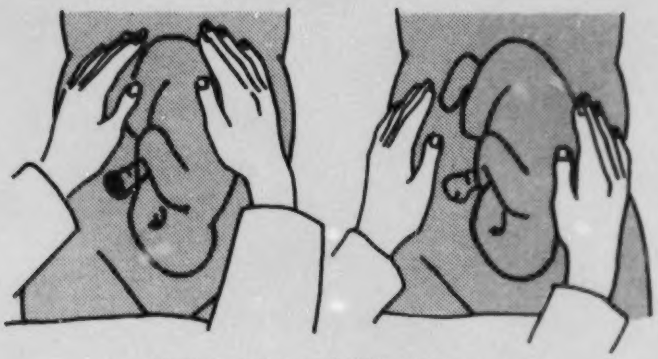
- A. Wash hands
- B. Identify patient and explain procedure
- C. Provide privacy
- D. Warm bell of scope in your hand
- E. Determine that patient is not having a contraction

JOB SHEET #3

F. Palpate uterus to determine position of fetus (Figures 12 and 13)

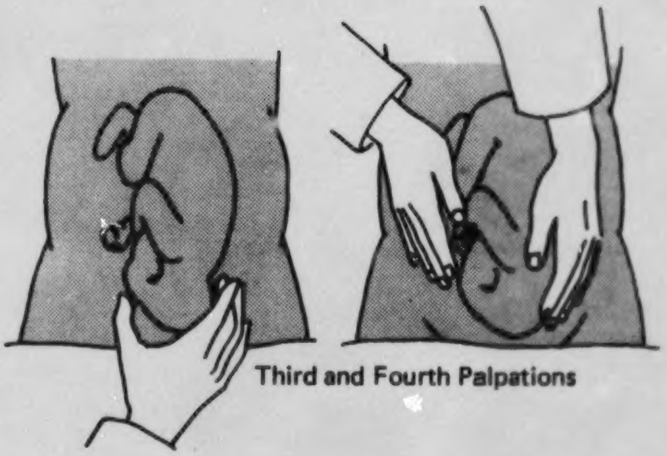
(NOTE: The fetal heart tones are best heard through the baby's back because it is usually located toward the mother's abdominal wall. The back of the fetus is felt as a firm, continuous mass.)

FIGURE 12



First and Second Palpations
(Leopold Manuvers)

FIGURE 13

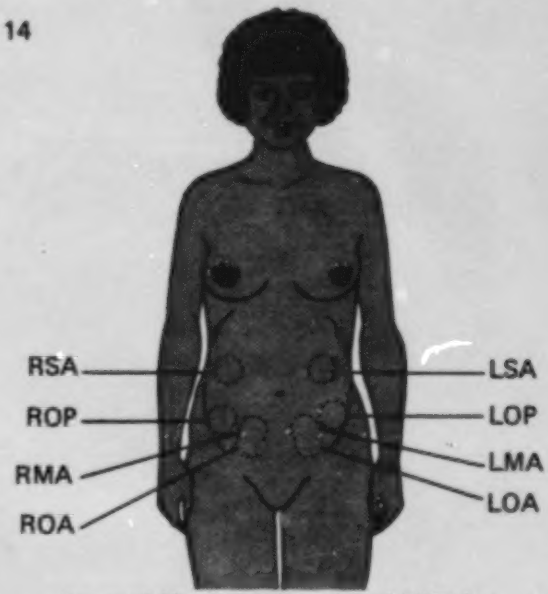


Third and Fourth Palpations

JOB SHEET #3

G. Locate fetal heart tone by listening with scope (Figure 14)

FIGURE 14



Areas of Maximum Density of FHT for Different Fetal Positions

H. Count heart rate for sixty seconds; palpate the mother's pulse at the same time to be sure you are counting the fetal heart rate

(NOTE: Rate may also be calculated by multiplying the rate for fifteen seconds by four to determine the rate for one minute.)

I. Count fetal heart rate for a full minute for a more accurate check if rate is irregular or appears to be too slow or too rapid

J. Mark abdomen with pen to aid in relocating heart tone

K. Record fetal heart rate and time taken

JOB SHEET #3

III. Checklist for monitoring fetal heart rate

		Performed Well	Needs Improvement
A.	Washed hands, identified patient, explained procedure, and provided privacy	☐	☐
B.	Warmed bell of scope in hand	☐	☐
C.	Determined that patient was not having a contraction	☐	☐
D.	Palpated uterus to determine position of fetus	☐	☐
E.	Located fetal heart tone by listening with scope	☐	☐
F.	Counted heart rate for sixty seconds and palpated the mother's pulse at the same time to be sure that fetal heart rate was being counted	☐	☐
G.	Counted fetal heart rate for a full minute for more accurate check if rate appeared irregular or too slow or too rapid	☐	☐
H.	Marked abdomen with pen to aid in relocating heart tone	☐	☐
I.	Recorded fetal heart rate and time taken	☐	☐

Comments: ____

____

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CARE OF THE PATIENT IN LABOR AND DELIVERY
UNIT III

JOB SHEET #4–TEST FOR DEEP TENDON REFLEXES (DTRs)

(NOTE: These tests are indicated for patients who are preeclamptic and those who have eclampsia. Follow hospital procedures in performing these tests, including the time span between each assessment.)

I. Equipment

   A. Percussion hammer

   B. Chart or form for noting findings

   (NOTE: The following rating scale is used to determine responses.)

+	Very brisk, hyperactive; with spastic alternation of contraction and relaxation (clonus)
3+	Hyperflexion without the clonus
2+ 1+	Within normal range
0	No reflex

JOB SHEET #4

II. Procedure

A. Explain procedure to patient

B. Test biceps reflex

1. Place patient's arm over your opposite arm, so that it rests upon your forearm

2. With your hand supporting patient's arm under medial side of elbow, place your thumb on patient's tendon of biceps in the cubital fossa (Figure 15)

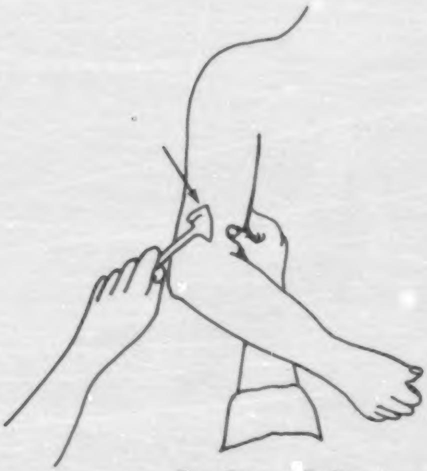
   (NOTE: If the patient flexes the elbow slightly, you will feel the tendon stand out under your thumb.)

3. Have patient rest her arm on your forearm, and let her arm relax completely

4. When her arm is totally relaxed, tap your thumbnail with narrow end of hammer

   (NOTE: Patient's biceps will jerk slightly. You will be able to either see or feel its movement.)

FIGURE 15



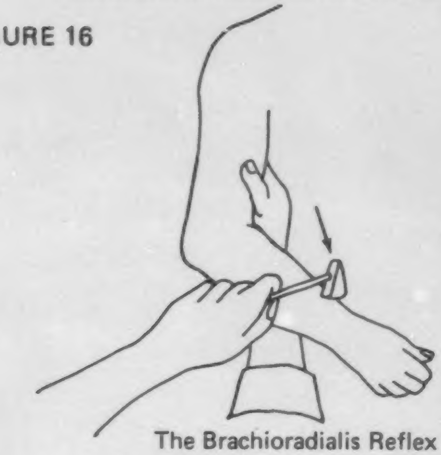
The Biceps Reflex

JOB SHEET #4

C. Test brachioradialis reflex

1. Support patient's arm in the same manner described for testing the biceps reflex
2. Using flat edge of hammer, tap patient's brachioradialis tendon at the distal end of radius to elicit radial jerk (Figure 16)

FIGURE 16



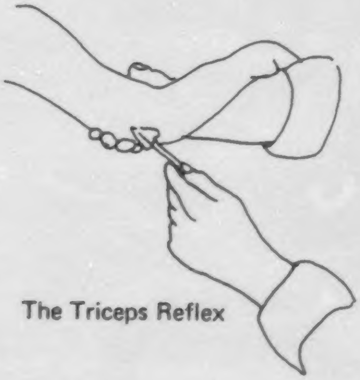
The Brachioradialis Reflex

D. Test triceps reflex

1. Keep patient's arm in same position used for two previous tests, and ask patient to relax arm completely
2. When you feel the lack of tension in the triceps muscle, use the narrow end of hammer to tap triceps tendon where it crosses the olecranon fossa (Figure 17)

   (NOTE: You should be able to see the reflex or to feel it as a slight jerk on your supporting arm.)

FIGURE 17



The Triceps Reflex

JOB SHEET #4

E. Test patellar reflex

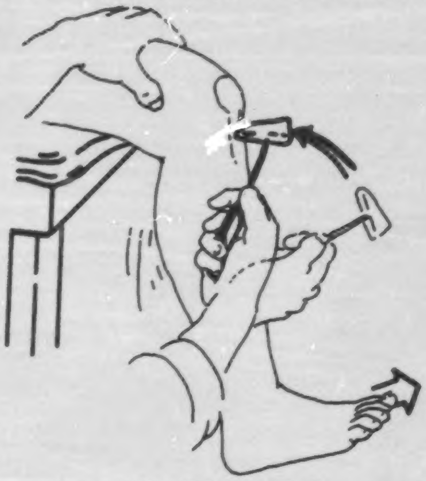
1. Have patient sit on edge of bed with her legs dangling free or have her sit in a chair with one leg crossed over her other knee

   (NOTE: If patient is in bed, support her knee in a few degrees of flexion.)

2. Locate patient's infrapatellar tendon accurately by palpating the soft tissue depression on either side of infrapatellear tendon (Figures 18)

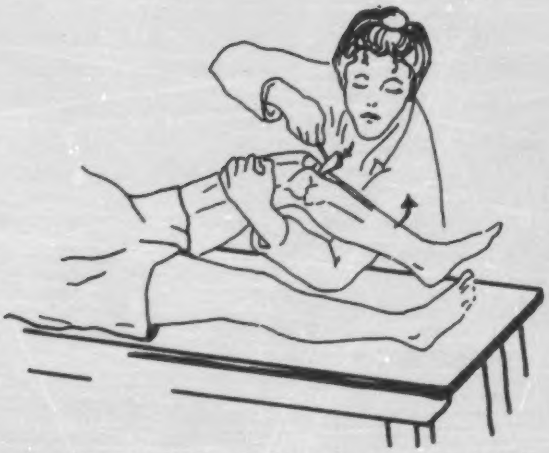
3. Elicit reflex by tapping patient's tendon with small end of hammer at level of knee joint, using a short, smart wrist action (Figure 19)

FIGURE 18



The Patellar Reflex

FIGURE 19



Position to elicit patellar reflex on a bed patient.

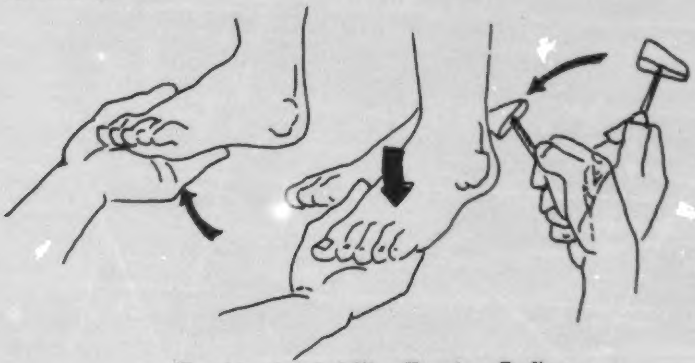
JOB SHEET #4

F. Test Achilles tendon reflex

1. Ask patient to sit on edge of bed and dangle her legs; put tendon into slight stretch by gently dorsiflexing the foot (Figure 20)
2. Locate patient's tendon accurately by placing your thumb and fingers into the soft tissue depressions on either side of tendon
3. Tap tendon with flat end of hammer, using a wrist-flexing action to induce sudden, involuntary plantar flexion of the foot
4. If patient's ankle joint is swollen, or if it would be painful to tap the Achilles tendon directly, test ankle reflex by having patient lie prone with her ankle over edge of bed
5. Press against ball of patient's foot with your fingers to dorsiflex it, and strike your fingers with flat end of hammer

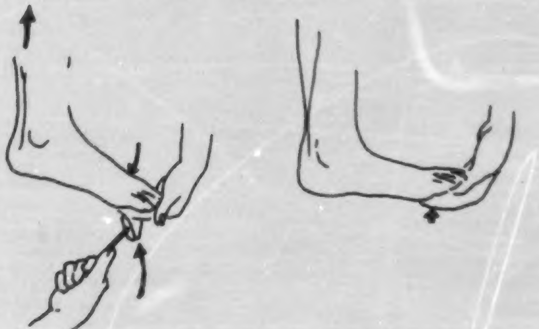
   (NOTE: The reflex should be detectable through your hand. See Figure 21.)

FIGURE 20



Testing the Achilles Tendon Reflex

FIGURE 21



An alternate method for testing the Achilles tendon reflex.

JOB SHEET #4

III. Checklist for testing deep tendon reflexes

	Performed Well	Needs Improvement
A. Biceps reflex		
1. Placed patient's arm over your opposite arm, so that it rested on your forearm	☐	☐
2. Placed your thumb on tendon of patient's biceps in the cubital fossa	☐	☐
3. Had patient rest arm on your forearm and let it relax completely	☐	☐
4. Tapped your thumbnail with narrow end of hammer; observed for biceps to jerk slightly	☐	☐
B. Brachoradialis reflex		
1. Supported patient's arm in same manner described for testing biceps reflex	☐	☐
2. Tapped brachioradialis tendon at distal end of radius using the flat edge of hammer; observed for radial jerk	☐	☐
C. Triceps reflex		
1. Kept patient's arm in the same position used for the two previous tests; asked patient to relax completely	☐	☐
2. Tapped triceps tendon with narrow end of hammer where tendon crosses the olecranon fossa	☐	☐
3. Observed reflex as a slight jerk on your supporting arm	☐	☐

Comments: ____

____

____

____

____

JOB SHEET #4

		Performed Well	Needs Improvement
D.	Patellar reflex		
	1. Instructed patient to sit on edge of bed with legs dangling free or had her sit in a chair with one leg crossed over the other knee	☐	☐
	2. Located infrapatellar tendon accurately by palpating soft tissue on either side of this tendon	☐	☐
	3. Elicited reflex by tapping tendon with hammer at level of knee joint, using a short, smart wrist action	☐	☐
E.	Achilles Tendon Reflex		
	1. Instructed patient to sit on edge of bed and dangle her legs; put the tendon into a slight stretch by gently dorsiflexing the foot	☐	☐
	2. Located tendon by placing thumb and fingers into soft tissue depressions on either side of it	☐	☐
	3. Tapped tendon with flat end of hammer, using a wrist-flexing action and induced a sudden, involuntary plantar flexion of the foot	☐	☐
	4. Used alternate method to test reflex if foot was swollen or painful	☐	☐

Comments: ____

____

____

____

____

CARE OF THE PATIENT IN LABOR AND DELIVERY
UNIT III

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with labor to their correct definitions. Write the correct numbers in the blanks.

_____a. Having the power or tendency to contract

_____b. Conforming to a given shape, as the fetal head in its passage through the birth canal

_____c. Line of junction or closure between bones, as in the skull

_____d. Part of fetus that is palpated through cervix at beginning of labor; presentation

_____e. Position assumed by fetus in utero

_____f. Stage in delivery when fetal head presents at vulva

_____g. Relationship of presenting part to mother's pelvis

_____h. Relationship of presenting part to level of ischial spines

_____i. Highest point of skull; the crown

_____j. Mass of thick, tenacious mucus which fills cervix during pregnancy and is discharged at beginning of labor

_____k. Amnion; bag of waters

_____l. Premature expulsion of the cord during parturition, before delivery of fetus

_____m. Tearing or breaking of fetal membranes; rupture of membranes

_____n. Downlike hair that covers fetus from approximately the fifth month of gestation

_____o. Cheesy deposit on skin of fetus

_____p. Pasty, greenish mass that collects in intestine of fetus; consists of mucus, epithelial cells, bile, lanugo, and vernix caseosa

1. Amniotic sac
2. Molding
3. Prolapse of the umbilical cord
4. Crowning
5. Contractile
6. Vertex
7. Suture line
8. Amniotomy
9. Attitude
10. Station
11. Presenting part
12. Mucous plug
13. Position
14. Vernix caseosa
15. Meconium
16. Lanugo

TEST

_____q. Sudden expulsion of fetus without preparation for delivery

_____r. Drug that stimulates uterine contractions

_____s. Soft and spongy to palpation

_____t. Diminution or cessation of uterine contractions during labor

_____u. Abnormal size relationship between two objects

_____v. Pertaining to head of fetus and pelvis of mother

17. Uterine inertia
18. Disproportion
19. Cephalopelvic
20. Oxytocin
21. Precipitation
22. Boggy

2. Select from the following list signs and symptoms of labor. Write an "X" in the blank before each correct answer.

_____a. Urinary frequency

_____b. Constricted pupils

_____c. Rupture of membranes

_____d. Bloody show

_____e. Meconium stain in amniotic fluid

_____f. Uterine contractions which gradually increase in frequency, intensity, and duration

_____g. Lightening

_____h. Recurrent pains in back and/or abdomen

_____i. Sharp pains in lower abdomen

3. List possible reasons for the onset of labor.

a. ______________________________

b. ______________________________

c. ______________________________

____

d. ______________________________

____

TEST

4. Describe functions of the pelvis and uterus during labor.

   a. Pelvis

      1) False-- ______________________________

      ____

      ____

      2. True-- ______________________________

      ____

      ____

   b. Uterus-- ______________________________

   ____

   ____

5. Distinguish between signs of true and false labor. Write a "T" for true labor and an "F" for false labor in the blanks.

______a. Irregular contractions that disappear upon lying down

______b. Contractions increased by activity

______c. Discomfort mainly in abdomen

______d. Regular contractions that gradually intensify

______e. Discomfort stops with medication

______f. Soft cervix

______g. No bloody show

______h. Evidence of bloody show

______i. Firm cervix

______j. Descent of presenting part

______k. No change produced by activity

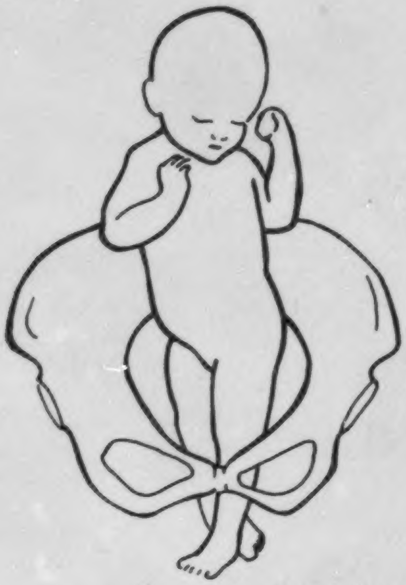
______l. Abdominal pain sometimes accompanied by backache

______m. Presenting part does not descend

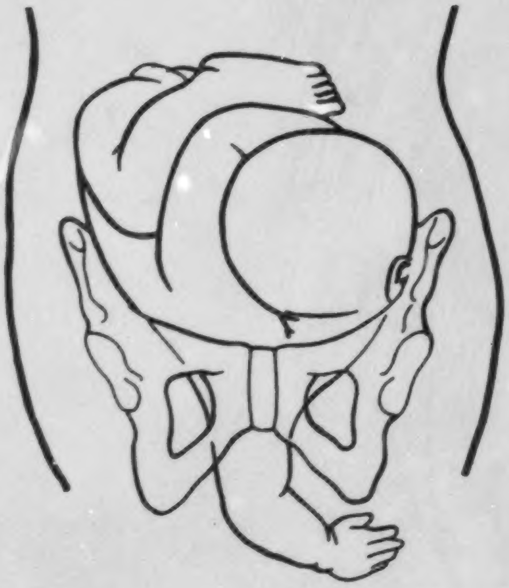
______n. Discomfort not relieved by mild sedation

TEST

6. Label presentations and positions of fetus in relationship to the mother. Write the correct names in the blanks.

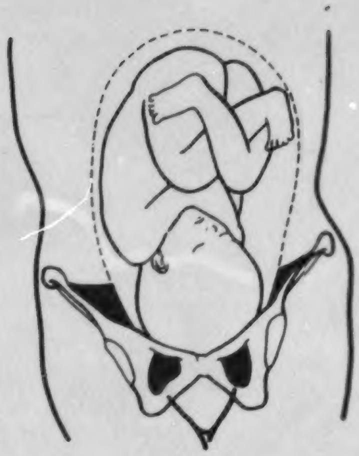


a. ______________________________

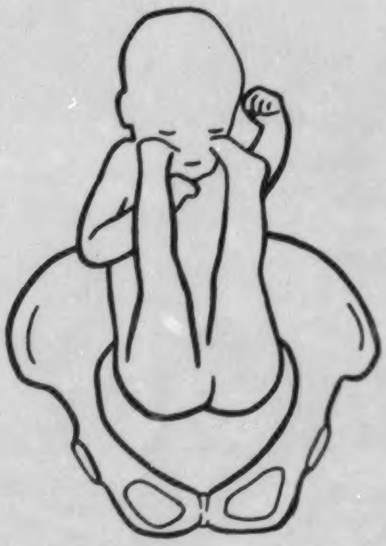


b. ______________________________

TEST

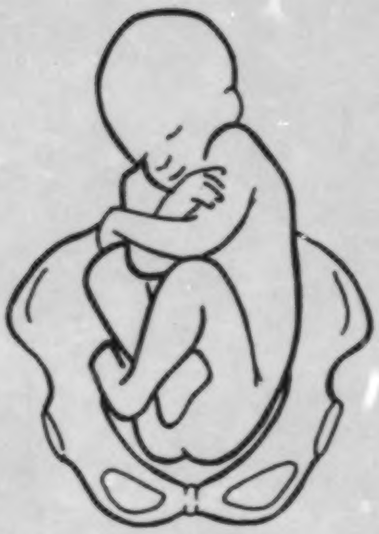


c. ____



d. ____

TEST



e. ______________________________

7. Match stations of descent to their correct descriptions. Write the correct numbers in the blanks.

_____a. Presenting part freely movable above inlet

_____b. Presenting part partially through inlet

_____c. Largest diameter of presenting part through inlet

_____d. Chin flexed on chest with occiput presenting

1. Engaged
2. Floating
3. Flexion
4. Dipping

8. Describe the first stage of labor.

a. Characteristics of early phase--______________________________

____

____

____

____

TEST

b. Characteristics of mid- or active phase--______________________________

c. Characteristics of transition or end of stage one--______________________

d. Rupture of membranes--______________________________

9. State nursing responsibilities when admitting a patient in labor.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

TEST

f.

g.

10. Describe nursing responsibilities during the first stage of labor.

TEST

11. Select from the following list maternal danger signals. Write an "X" in the blank before each correct answer.

_____a. Elevation of temperature with or without chills

_____b. Dry, hacking cough

_____c. Constipation

_____d. Change in pulse rate and deviation in blood pressure

_____e. Rhinitis

_____f. Change in tone and contour of uterus which may indicate impending rupture

_____g. Sudden hard contraction followed by cessation of contractions, acute abdominal pain, and signs of shock

_____h. Diaphoresis

_____i. Excessive vomiting

_____j. Dry mouth

_____k. Hyperventilation which disrupts normal oxygen and carbon dioxide exchange

_____l. Supine hypotension syndrome which produces symptoms similar to shock and may decrease fetal heart rate

_____m. Nausea

_____n. Pallor, cyanosis, or signs of cardiac distress

_____o. Pressure in rectal area

_____p. Vaginal bleeding

_____q. Headache, dizziness, epigastric pain, spots before the eyes, edema of hands or face

_____r. Excessive hunger

_____s. Convulsions

12. List fetal danger signals.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

TEST

13. State facts related to complications of labor.

COMPLICATION	CHARACTERISTICS	CAUSES	TREATMENT
Primary inertia	a. ______	Muscle weakness and/or nerve defects; overdistention of uterus due to multiple births; emotional stress; rigid, unaffected cervix; too early sedation (usually in an older primipara)	Rest, sedation; oxytocics after rest
b. ______	Occurs during mid- or active phase of stage one; contractions are weak, but coordinated and not too painful	Overdistention of uterus; distention of bladder or bowel; weak abdominal muscles; emotional stress; cervical rigidity; fatigue; pelvic disproportion; poor position of fetus	Oxytocics; amniotomy if indicated; rest; C-section may be needed if fetus is in poor position or if there is pelvic disproportion
Pathological retraction ring or Bandl's ring	Overstretching of lower segment of uterus with thickening of muscles in upper segments; strong contractions with bearing down but no progress; rapid pulse and panting respiration; extreme pain	c. ______	Notify doctor; may indicate need for C-section
d. ______	Contractions felt in the back, causing almost continuous back pain; early rupture of membranes; frequent and irregular contractions; presenting part remains high during labor	Premature labor; short umbilical cord; disproportion of pelvis; placenta placed low	Manual rotation of fetus, back massage; may indicate need for forceps or C-section delivery

TEST

COMPLICATION	CHARACTERISTICS	CAUSES	TREATMENT
Prolapsed cord	e.____________________ ______________________ ______________________ ______________________ ______________________	Premature rupture of membranes before presenting part begins descent; long cord; low-placed placenta; hydramnios; premature labor	Bed rest after rupture of membranes; Trendelenberg position; application of sterile moist dressings to protect cord; immediate delivery or C-section if indicated
Precipitate labor and delivery	Labor short, progresses rapidly; occurs usually in multiparas	f.____________________ ______________________	Prevent by close monitoring of patient; assist with birth

TEST

14. Distinguish between indications and contraindications for induction of labor. Write an "I" before indications for induction of labor and a "C" for contraindications for induction of labor in the blanks.

______ a. Diabetic mother

______ b. Previous cesarean section

______ c. Cephalopelvic disproportion

______ d. Preeclampsia

______ e. Multiple gestations

______ f. Ruptured membranes for more than twelve to twenty-four hours

______ g. Postmaturity

______ h. Abnormal presentation

______ i. Fetal distress

______ j. Uterine inertia

______ k. Overdistention of uterus

15. Match terms associated with delivery to their correct definitions. Write the correct numbers in the blanks.

______ a. Injection of anesthesia into space outside dura mater in lumbar region

______ b. Anesthesia induced by intermittent or continuous injection of an anesthetic into sacral canal

______ c. Sensory loss in saddle area which occurs in a type of caudal anesthesia

______ d. Injection of anesthesia through vagina into area around cervix

______ e. Injection of local anesthesia into pudendal nerve on both sides of perineum near ischial spine

______ f. Tear or wound made by tearing

______ g. Outer membrane covering the spinal cord

______ h. Medial or lateral incision of the perineum to avoid laceration

1. Paracervical block
2. Epidural anesthesia
3. Saddle block
4. Pudendal block
5. Caudal block
6. Laceration
7. Dura mater
8. Episiotomy

TEST

16. Describe advantages and disadvantages of types of anesthesia used during delivery.

a. Inhalation

1) Advantages-- ______________________________

____

____

____

2) Disadvantages-- ______________________________

____

____

____

____

b. Regional

1) Advantages-- ______________________________

____

____

____

2) Disadvantages-- ______________________________

____

____

____

____

c. Hypnosis

1) Advantages-- ______________________________

____

____

____

____

TEST

2) Disadvantages-- ____________________

____

____

17. List procedures necessary to prepare delivery room.

a. ____________________

b. ____________________

c. ____________________

18. List characteristics of the second stage of labor.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

f. ____________________

19. State nursing responsibilities during transfer and preparation of patient in delivery room.

a. ____________________

b. ____________________

c. ____________________

d. ____________________

e. ____________________

f. ____________________

g. ____________________

h. ____________________

i. ____________________

TEST

20. Select from the following list nursing responsibilities during the second stage of labor. Write an "X" in the blank before each correct answer.

______ a. Prepare nursing chart

______ b. Coach patient in proper technique of exerting downward pressure during contractions and relaxing as much as possible between contractions

______ c. Check maternal pulse and blood pressure frequently

______ d. Discuss contraceptive methods with mother

______ e. Continue monitoring contractions and fetal heart

______ f. Provide for comfort as indicated

______ g. Discuss breast-feeding with mother

______ h. Administer enema to stimulate contractions

______ i. Provide emotional support and encouragement

______ j. Measure abdominal girth

______ k. Observe for elimination and/or bladder distention

______ l. Note and report any unusual symptoms

______ m. Insert retention catheter

______ n. Give medications as prescribed

______ o. Pad side rails of bed

______ p. Provide mouth care and personal care as indicated

______ q. Maintain patient safety as necessary

21. State procedures used during delivery of infant.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

TEST

g. ____________________

h. ____________________

i. ____________________

j. ____________________

22. State nursing responsibilities for immediate care of the newborn.

a. ____________________

____

b. ____________________

c. ____________________

d. ____________________

e. ____________________

f. ____________________

____

g. ____________________

h. ____________________

23. List characteristics of the third stage of labor.

a. First phase

1) ____________________

2) ____________________

3) ____________________

4) ____________________

b. Delivery of the placenta

1) ____________________

____

2) ____________________

____

TEST

3) ______________________________

____

____

4) ______________________________

____

5) ______________________________

____

6) ______________________________

____

24. Select from the following list characteristics of the fourth stage of labor. Write an "X" in the blank before each correct answer.

_____a. Recovery from anesthesia if given

_____b. Uterine contractions begin again

_____c. Fundus drops down behind symphis pubis

_____d. Stabilization of vital signs, bleeding, and fundal muscle tone

_____e. Occasional, sudden, severe chill due to sudden change in intra-abdominal pressure

_____f. Vital signs increase

25. State nursing responsibilities for care of mother during the fourth stage of labor.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

g. ______________________________

h. ______________________________

TEST

i. ____________________

j. ____________________

k. ____________________

l. ____________________

m. ____________________

n. ____________________

26. Discuss the cesarean section.

27. Describe nursing responsibilities for patient having cesarean section.

a. Preoperative-- ____________________

b. Postoperative-- ____________________

TEST

28. Arrange in order steps to take when an emergency delivery is performed. Write a "1" before the first step, a "2" before the second step, and so on.

_____a. Check to see that cord is not around infant's neck after head is delivered

_____b. Keep infant warm by placing on mother's abdomen and covering

_____c. Provide as much asepsis as possible

_____d. Clamp cord with two hemostats, or tie in two places with tape or ribbon, approximately one inch apart

_____e. Allow baby to deliver, providing support to mother's perineum, and baby's head and body while emerging

_____f. Massage uterus to keep it firm after placenta is expelled

_____g. Cut cord with sterile scissors after pulsation ceases

_____h. Clear airway and stimulate respirations immediately after infant is born

_____i. Keep mother and infant warm

_____j. Wait for placenta to emerge by itself; do not pull on cord

_____k. Clean mother and apply perineal pads

_____l. Note on patient's record and report when a delivery is unsterile

(NOTE: Test questions 29 and 30 list assignment and job sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

29. Complete an obstetrical care study.

30. Demonstrate the ability to

    a. Perform a perineal prep.

    b. Time uterine contractions.

    c. Monitor fetal heart rate.

    d. Test for deep tendon reflexes (DTRs).

CARE OF THE PATIENT IN LABOR AND DELIVERY
UNIT III

ANSWERS TO TEST

1.

a.	5	i.	6	p.	15
b.	2	j.	12	q.	21
c.	7	k.	1	r.	20
d.	11	l.	3	s.	22
e.	9	m.	8	t.	17
f.	4	n.	16	u.	18
g.	13	o.	14	v.	19
h.	10				

2. a, c, d, f, g, h

3. Answer should include the following

   a. Diminished placental function

   b. Distended uterus causing pressure on nerve and muscle fibers

   c. Pressure causing stretching of cervix which stimulates uterine contractions

   d. Decreased uterine blood flow and hormone production causing irritation of the myometrium

4. Descriptions should include the following

   a. Pelvis

      1) False

         a) Supports enlarging uterus during pregnancy

         b) Helps direct fetal head into true pelvis

      2) True

         a) Articulations widen to accomodate fetus, particularly the skull

         b) Ligaments expand to allow fetus to pass through

   b. Uterus

      1) Upper segment of thick and contractile muscles contracts rhythmically

ANSWERS TO TEST

2) Lower segment of thin and passive muscles gradually stretches

3) Contraction and stretching brings about dilatation and effacement of cervix

5. a. F
   b. T
   c. F
   d. T
   e. F
   f. T
   g. F
   h. T
   i. F
   j. T
   k. F
   l. T
   m. F
   n. T

6. a. Footling breech
   b. Shoulder
   c. Cephalic
   d. Frank breech
   e. Complete breech

7. a. 2
   b. 4
   c. 1
   d. 3

8. Descriptions should include the following
   a. Characteristics of early phase
      1) Contractions are slow, short, and rhythmic
      2) Frequency is every five to twenty minutes
      3) Duration is thirty to fifty seconds
      4) Discomfort radiates from lumbar area to anterior abdomen
      5) Cervix dilates to three cm
   b. Characteristics of mid- or active phase
      1) Contractions increase in frequency, duration, and intensity
      2) Frequency is every two to four minutes
      3) Duration is forty-five to sixty seconds
      4) Cervix dilates to eight cm

ANSWERS TO TEST

c. Characteristics of transition or end of stage one

  1) Contractions become longer and more intense

  2) Frequency is every one and one-half to three minutes

  3) Duration is sixty to ninety seconds

  4) Cervix completely dilates to ten cm

  5) Urge to push occurs

d. Rupture of membranes

  1) May occur any time during labor

  2) Prolapse of umbilical cord may follow premature rupture

9. Answer should include the following

a. Identify patient and make her comfortable

b. Introduce yourself and explain hospital procedures and techniques

c. Check vital signs, including fetal heart rate

d. Notify doctor of admission; provide doctor with vital signs, fetal heart rate, and status of labor

e. Prepare patient as directed by physician

f. Obtain history on appropriate form

g. Assist with physical examination, including assessment of obstetrical status

10. Descriptions should include the following

a. Protect patient from physical harm

  1) Assist patient in getting in and out of bed

  2) Use side rails if patient is sedated

b. Monitor progress and condition

  1) Take vital signs at prescribed intervals

  2) Determine frequency, intensity, and duration of contractions

  3) Observe amount and color of vaginal discharge

ANSWERS TO TEST

c. Check contour and size of abdomen
    1) Check fetal movements
    2) Check for bladder distention
d. Provide food and fluids as prescribed
e. Provide for comfort
    1) Change position frequently
    2) Ambulate if possible until membranes rupture
    3) Provide mouth care frequently
    4) Keep patient clean and dry
    5) Omit perineal pads during labor
f. Monitor closely after membranes rupture
    1) Observe for amount of discharge
    2) Observe for bleeding
    3) Observe for meconium staining
    4) Observe for fetal heart distress
    5) Observe for prolapsed cord
g. Administer medication as prescribed
h. Provide emotional support
i. Monitor fetal heart
    1) Explain to patient the use of the monitor system and equipment
    2) Check frequently to assess any changes in fetal status
    3) Report immediately if rate is below 100 or above 160; abnormal rate indicates fetal distress
    4) Determine location of fetal heart

11. a, d, f, g, i, k, l, n, p, q, s

ANSWERS TO TEST

12. a. Deviation in fetal heart rate

    b. Passage of meconium in cephalic presentation

    c. Fetal hyperactivity which indicates diminished oxygen supply

    d. Prolapse of umbilical cord

13. a. Inefficient contractions persist from onset of labor; latent phase of first stage is prolonged

    b. Secondary inertia

    c. Improper use of sedatives; disproportion of pelvis or fetus; abnormal presentation; prolonged labor

    d. Abnormal position of fetus

    e. Umbilical cord visible or protruding from vagina or through os

    f. Relaxed cervix; small fetus; multiple birth

14. a. I
    b. C
    c. C
    d. I
    e. C
    f. I
    g. I
    h. C
    i. C
    j. I
    k. C

15. a. 2
    b. 5
    c. 3
    d. 1
    e. 4
    f. 6
    g. 7
    h. 8

16. Description should include the following

    a. Inhalation

       1) Advantages

          a) Causes loss of consciousness and complete relaxation during procedure

          b) May be used in complicated delivery

ANSWERS TO TEST

2) Disadvantages

a) May depress respirations of mother and/or neonate

b) Frequently causes vomiting with possibility of aspiration

c) May impair uterine contractions

d) Requires an anesthetist for administration

b. Regional

1) Advantages

a) Mother awake throughout the procedure

b) Safer for neonate

2) Disadvantages

a) Patient may have difficulty bearing down after anesthesia

b) Blood pressure and/or respirations may be affected in higher level administration

c) Voiding may be difficult in postpartum period

d) Repeated injections may be necessary

e) Patient unable to control lower extremities

c. Hypnosis

1) Advantages

a) Requires less medication

b) Patient is awake and cooperative during birth process

c) Hypnotic and posthypnotic suggestions help to alleviate discomfort

2) Disadvantages

a) Requires much advance preparation and planning

b) Patient is in a suggestive state, so great care is needed in what is said in patient's hearing

17. a. Determine what equipment will be needed and prepare as indicated

b. Open and arrange sterile packs of equipment, then cover with sterile cover

c. Prepare incubator or Isolette

ANSWERS TO TEST

18. Answer should include the following
    - a. Increased bloody show
    - b. Pressure on rectum, causing patient to feel desire to defecate
    - c. Spontaneous bearing-down reflex
    - d. Contractions almost continuous
    - e. Perineum begins to bulge
    - f. Crowning

19. Answer should include the following
    - a. Transfer patient at beginning of second stage, usually when physician or charge nurse determines that delivery is imminent
    - b. Encourage patient not to push during transfer and positioning on delivery table
    - c. Secure patient's wrists to prevent contamination of sterile field
    - d. Place patient's legs in stirrups by raising both legs at the same time and adjusting stirrups to fit patient properly; cover as needed
    - e. Position delivery table as needed
    - f. Prepare abdomen, thighs, and entire perineal area as indicated by physician or hospital policy
    - g. Place sterile drape under buttocks
    - h. Provide a stool for physician; place sterile supply table conveniently, adjust lights, and secure any additional supplies
    - i. Encourage and assist patient as needed unless patient is given a general anesthetic

20. b, c, e, f, i, k, l, n, p, q

21. Answer should include the following
    - a. Physician examines patient vaginally to determine position of infant
    - b. Patient may be catheterized to ensure an empty bladder
    - c. Physician may perform an episiotomy

ANSWERS TO TEST

d. Forceps may be used to assist the delivery

e. Perineum is supported to prevent laceration

f. Physician checks after head is delivered to see that umbilical cord is not wrapped around infant's neck

g. Physician uses a rubber syringe to aspirate mucus and fluid from infant's mouth as head rotates

h. Physician continues delivery, guiding infant as needed

i. After delivery, physician lowers infant's head to clear airway, aspirates mouth and nose, places infant on mother's abdomen, and clamps and cuts cord

j. Infant is given to nurse for further care

22. Answer should include the following

a. Establish and maintain a patent airway by using wipe or suction to remove mucus and secretions from infant's nose and mouth

b. Stimulate respiration as needed; administer oxygen as needed, or use further resuscitation measures as needed

c. Position infant to prevent aspiration

d. Provide for warmth by drying; cover head

e. Determine Apgar score

f. Identify properly by footprinting infant and thumbprinting mother; place identifying bands on infant and mother while still in delivery room

g. Provide prophylactic treatment for eyes

h. Administer injection of vitamin K if prescribed

23. a. First phase

1) Gush of blood from vagina is seen

2) Umbilical cord begins to descend

3) Fundus becomes firm

4) Spontaneous bearing-down occurs

ANSWERS TO TEST

b. Delivery of placenta

   1) Uterus continues to contract causing separation of placenta from uterine wall; uterus assumes globular shape

   2) Placenta is expelled or delivered by physician

   3) Physician may order administration of an oxytocic preparation such as Pitocin

   4) Placenta is checked carefully to be sure that it is intact

   5) Physician inspects birth canal for any lacerations, and sutures episiotomy and lacerations as required

   6) Injection of medication may be given at this time to aid in suppressing lactation if patient has opted not to breast-feed

24. a, d, e

25. a. Cleanse patient as necessary and dress in clean gown

    b. Apply perineal pads from front to back and secure

    c. Cover patient and take to recovery room or to unit via stretcher

    d. Monitor vital signs and intravenous administrations frequently

    e. Palpate fundus frequently for firmness and location; fundus should remain firm and at or below the level of the umbilicus

    f. If fundus relaxes or becomes boggy, massage until firm

    g. Call physician or charge nurse immediately if massage fails to firm fundus

    h. Observe vaginal bleeding and monitor patient for signs of shock

    i. Observe for elimination and/or bladder distention

    j. Note and report any unusual symptoms

    k. Give medications as prescribed

    l. Provide mouth care and personal care as indicated

    m. Maintain patient safety as necessary

    n. Provide emotional support as indicated by reducing disturbances to provide rest, permitting patient full expression of her feelings, and allowing her to see her baby and family when she is ready

ANSWERS TO TEST

26. a. Cesarean sections may be done on an elective or emergency basis, depending on the patient's history and condition

    b. Most frequent cause for this procedure is dystocia due to disproportion of fetus to pelvis

    c. Classical section is performed with the incision in the midline and can be performed very quickly in emergency situations

    d. Low cervical section is made with a low horizontal incision line and is used whenever possible; allows wound to heal more easily, and reduces chances of hemorrhage or infection

27. Descriptions should include the following

    a. Preoperative

    1) Monitor fetal heart and vital signs of patient
    2) Prepare abdomen according to physician's preference and/or hospital procedure
    3) Provide additional care as indicated
    4) Avoid enemas, sedatives, and narcotics

    b. Postoperative

    1) Provide care as for other abdominal surgery
    2) Observe for vaginal bleeding
    3) Check fundus frequently; massage until firm
    4) Provide aseptic breast and perineal care
    5) Assist with manual expression of breast milk until patient is able to breast-feed

28.

a.	3	e.	2	i.	11
b.	5	f.	9	j.	8
c.	1	g.	7	k.	10
d.	6	h.	4	l.	12

29. Evaluated to the satisfaction of the instructor

30. Performance skills evaluated to the satisfaction of the instructor

CARE OF THE POSTPARTUM PATIENT
UNIT IV

UNIT OBJECTIVE

After completing this unit, the student should be able to provide nursing care for the postpartum patient. This knowledge will be shown by completing the job sheet and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with postpartum care to their correct definitions.
2. Describe the normal body changes in puerperium.
3. State nursing responsibilities in observing the fundus and lochia.
4. Discuss considerations of the new mother's nutritional status.
5. Describe causes, symptoms, treatment, and nursing implications for postpartum complications.
6. State actions that give support to the grieving mother and family.
7. Distinguish between the advantages and disadvantages of rooming-in.
8. Demonstrate the ability to give perineal care.

CARE OF THE POSTPARTUM PATIENT
UNIT IV

SUGGESTED ACTIVITIES

I. Suggested activities

   A. Order materials planned to supplement unit.

      1. Filmstrips--Postpartum filmstrips available from Trainex Corporation, P.O. Box 116, Garden Grove, California 92642

      2. Pamphlet--*Breast-feeding and the Obstetricial Nurse*. La Leche League International, Inc., 9616 Minneapolis Avenue, Franklin Park, Illinois 60131.

   B. Make transparency.

   C. Provide students with objective sheet.

   D. Provide students with information and job sheets.

   E. Discuss unit and specific objectives.

   F. Discuss information sheet.

   G. Demonstrate and discuss procedures outlined in job sheet.

   H. Develop appropriate learning activities for special needs students.

   I. Provide any special equipment used in the facility and demonstrate its use.

      EXAMPLES: Perineal light, sitz baths

   J. Give test.

   K. Reteach if necessary.

II. Instructional materials

   A. Objective sheet

   B. Suggested activities

   C. Information sheet

   D. Transparency master: TM #1--Uterine Involution

SUGGESTED ACTIVITIES

- E. Job Sheet #1--Give Perineal Care
- F. Test
- G. Answers to test

III. Unit references

- A. Anderson, Barbara, and Pamela Shapiro. *Obstetrics for the Nurse.* Albany, New York: Delmar Publishers, 1972.
- B. Jensen, Margaret Duncan, Ralph Benson, and Irene M. Bobak. *Maternity Care: The Nurse and the Family.* St. Louis: The C.V. Mosby Company, 1977.

CARE OF THE POSTPARTUM PATIENT
UNIT IV

INFORMATION SHEET

I. Terms and definitions

A. Involution--Return of the uterus to its normal size following delivery

B. Puerperium--Postpartum period lasting from three to six weeks; starts at delivery and ends with the complete involution of the uterus and healing of pelvic structures

C. Engorged--Distended or completely filled

D. Prolactin--Hormone secreted by the anterior pituitary; stimulates lactation

E. Lactogenic--Inducing the secretion of milk

F. Lactation--Formation and secretion of milk

G. Colostrum--Watery, yellowish fluid, high in protein and low in carbohydrates and fats, secreted by the breasts after childbirth; acts as a laxative, which aids in expelling meconium

H. Lochia--Postpartum uterine discharge consisting of red and white blood cells, fatty epithelial cells, shreds of endometrium, and bacteria

I. Lochia rubra--Reddish discharge first four days

J. Lochia serosa--Brownish discharge fourth to tenth day

K. Lochia alba--Yellowish or white discharge after tenth day

L. Venous stasis--Slowing or cessation of flow of blood in the veins

M. Postpartum "blues"--Temporary depression following childbirth usually appearing three days after birth; believed to be due to hormonal changes and emotional stress

II. Normal body changes in puerperium

A. Breasts

1. Colostrum is secreted the first two or three days; then secretion of milk begins and breasts become engorged

INFORMATION SHEET

2. Estrogen and progesterone secreted by the placenta during pregnancy inhibit production of prolactin or lactogenic hormone

   (NOTE: Mothers who do not plan to breast-feed are given drugs after delivery to suppress the prolactin or lactogenic hormone.)

3. Breasts may become swollen, hard, red, and painful

4. Incomplete emptying of breast decreases milk secretion

B. Uterus (Transparency #1)

1. Uterus gradually becomes smaller during the period of involution and descends into the pelvic cavity; by the tenth postpartum day, it should not be palpable above the symphysis pubis

2. Lining sloughs off and is discharged as lochia

3. Persistent reddish color of lochia after fourth or fifth day indicates that involution is not taking place or that placental fragments have been retained

C. Cervix

1. Is soft, flabby, and partly open

2. Muscle begins to regenerate and close the os after one week

3. Small lacerations may heal spontaneously or require cauterization later

4. External os remains somewhat wider and more slitlike

D. Perineal area

1. Vagina recovers slowly, but muscle tone never returns to the preparous state

2. Labia lose their cushion of fat and may become flabby

3. Perineal tone returns slowly over a six- to eight-week period

E. Abdomen

1. Muscles remain soft and flabby for some time

2. Striae gradually fade to silvery white but do not disappear

3. Separation of abdominal muscles may occur due to loss of muscle tone

4. Multipara may experience cramping

INFORMATION SHEET

F. Urinary tract

1. Bladder has increased capacity; the urge to empty may be diminished due to over-distention or anesthesia and analgesics
2. Bladder may fail to empty completely, which increases the incidence of bladder infections
3. Urine output is greatly increased (diuresis) the first 24 to 48 hours as the body excretes fluid retained during pregnancy
4. Distended bladder can impair involution process

G. Circulatory system

1. Blood loss during delivery decreases blood volume
2. Moderate anemia may occur due to blood loss
3. White cell count increases during labor and early puerperium
4. Fibrinogen level is elevated
5. Pulse rate slows after delivery
6. Diaphoresis may occur for several weeks

H. Hormonal function

1. Non-nursing mother
    a. Ovulation occurs in three to six weeks
    b. Menstruation resumes in five to eight weeks
2. Nursing mother
    a. Return of menstrual cycle varies; may not occur until after weaning
    b. Breast-feeding is not a reliable form of contraception due to variations of hormone production

I. Gastrointestinal system

1. Appetite for food and fluid is usually good
2. Bowel function may be delayed due to decreased intake during labor, flaccid abdominal muscles, decreased pressure from uterus, and/or fear of pain from episiotomy or hemorrhoids
3. Increased caloric and fluid intake is essential for the nursing mother

INFORMATION SHEET

J. Emotional changes

1. Need for rest and sleep is great in the immediate postpartum period
2. Following delivery, it is not unusual for mood changes to occur frequently with little apparent cause for exhilaration or depression
3. Mother may feel inadequate and unsure of her ability to cope with her new role
4. Some new mothers experience depression or postpartum "blues" in varying degrees, which may be due in part to physical changes accompanying pregnancy and childbirth
5. If symptoms of depression persist or become severe, the physician should be notified because this might indicate a more serious condition

III. Nursing responsibilities in observing the fundus and lochia (Transparency #1)

A. Fundus

1. Palpate fundus daily to determine its height (Transparency #1)
2. Massage fundus gently as needed to keep it firm; do not massage fundus if it is already firm
3. Report immediately if massage fails to firm fundus

B. Lochia

1. Note color, amount, and character of lochia

   (NOTE: Clots are abnormal and should be reported as well as persistent lochia rubra after fourth day; less discharge may occur in primiparas, nursing mothers, physically active multiparas, and those delivered by cesarean section.)

2. Reassure patient that lochia may increase when patient changes position and that this is normal and expected
3. Instruct patient to notify the physician if lochia rubra persists after dismissal from hospital or reoccurs after lochia alba

INFORMATION SHEET

IV. Considerations of the new mother's nutritional status

A. Good nutrition promotes recovery, aids in resisting infection, and improves the quality and quantity of milk

B. An additional intake of approximately 1000 calories will be needed by the nursing mother

C. Fluid intake of 2500 to 3000 cc is essential for the nursing mother; adequate fluid intake in the non-nursing mother aids adequate urination and defecation

D. Between-meal snacks are beneficial and may be needed to provide necessary food and fluid intake

INFORMATION SHEET

V. Causes, symptoms, treatment, and nursing implications for postpartum complications (Job Sheet #1)

Complication	Causes	Symptoms	Treatment	Nursing Implications
Hemorrhage	Uterine atony; vaginal and cervical lacerations; retention of placenta fragments; multiple births; multiparity	Bleeding in excess of 500 cc; rapid and/or thready pulse; decrease in blood pressure; pallor, chills, dyspnea and air hunger; restlessness; disturbed vision (NOTE: Normal blood loss during and after delivery is from 50 to 300 cc.)	Massage fundus until firm; administer oxytocic and/or vitamin K; repair lacerations if needed; replace fluid and blood if needed; may require D and C or other surgery if necessary	Observe closely and massage fundus using correct technique; *check vital signs*; administer Rx medications **(CAUTION: Check under patient for bleeding that has pooled; monitor vital signs and watch for internal bleeding.)**
Puerperal infection	Non-aseptic technique in examination or use of contaminated instruments in delivery that allow pathogenic organisms into genital tract; contact with persons with streptococci or staphylococci organisms	Foul-smelling lochia; continuous temperature over 100.4°F for two days or more excluding first twenty-four hours; chills; rapid pulse and respiration; large and tender uterus; headache; insomnia; anorexia	Isolate if needed; Fowler's position to promote drainage; oxytocics; antibiotics	Maintain aseptic techniques; observe drainage; administer Rx medications; provide support
Thrombophlebitis (NOTE: Lay term for this condition is *milk leg*.)	Venous stasis, clotting defects, excess fibrinogen	Chills and fever; pain in leg; leg feels hot to touch; swelling; red streaks or local inflammation in that leg	Anticoagulants; prothrombin and clotting times; application of heat or cold; bed rest; antiembolism hose	Elevate leg (supporting entire leg); bedcradle over leg; DO NOT massage leg; maintain bed rest; provide emotional support (NOTE: Help prevent complications by early ambulation.)
Mastitis	Infecting organism is usually hemolytic S aureous	Chills, fever, malaise, and tenderness are first symptoms; nipple fissure; infection moves to ducts; inflammation, edema, and engorgement obstruct flow of milk; may lead to breast abscess	Intensive antibiotic therapy, support of breast, local warm or cold packs and analgesics; if abscess develops, incision and draining must be performed	Administer antibiotics and analgesics; apply warm or cold packs, apply supportive device to breast; support mother and give encouragement (NOTE: If abscess occurs and incision and drainage take place, follow physician's orders for nursing care.)

INFORMATION SHEET

VI. Actions that give support to the grieving mother and family

A. Remember that a family coping with a handicapped infant or the loss of an infant by death or adoption requires a great deal of emotional support and understanding

B. Provide time and place for the bereaved patient to be with her husband, family, and friends

C. Transfer patient to another area of the hospital when indicated

D. Encourage free expression of feelings by listening

(NOTE: Check to see if a support group is available to provide assistance for families of infants with specific conditions.)

E. Provide information concerning the infant

(NOTE: Evading questions or lying to the patient concerning the infant is inexcusable.)

F. Do not avoid the patient and/or family because of the grief

G. Seek assistance from clergy if needed

VII. Advantages and disadvantages of rooming-in

(NOTE: Mother should know it is all right to request not to have rooming-in arrangement. Many mothers need extra time and rest.)

A. Advantages

1. Provides mother and infant with a natural mother-child relationship as soon as the mother is ready

2. Affords opportunity for on-demand feeding

3. Facilitates instruction of mothers and fathers in infant care

4. Strengthens parent-child relationship

5. Reduces incidence of cross-infection among infants

B. Disadvantages

1. May be impractical or impossible to carry out effectively if the mother is experiencing any complications

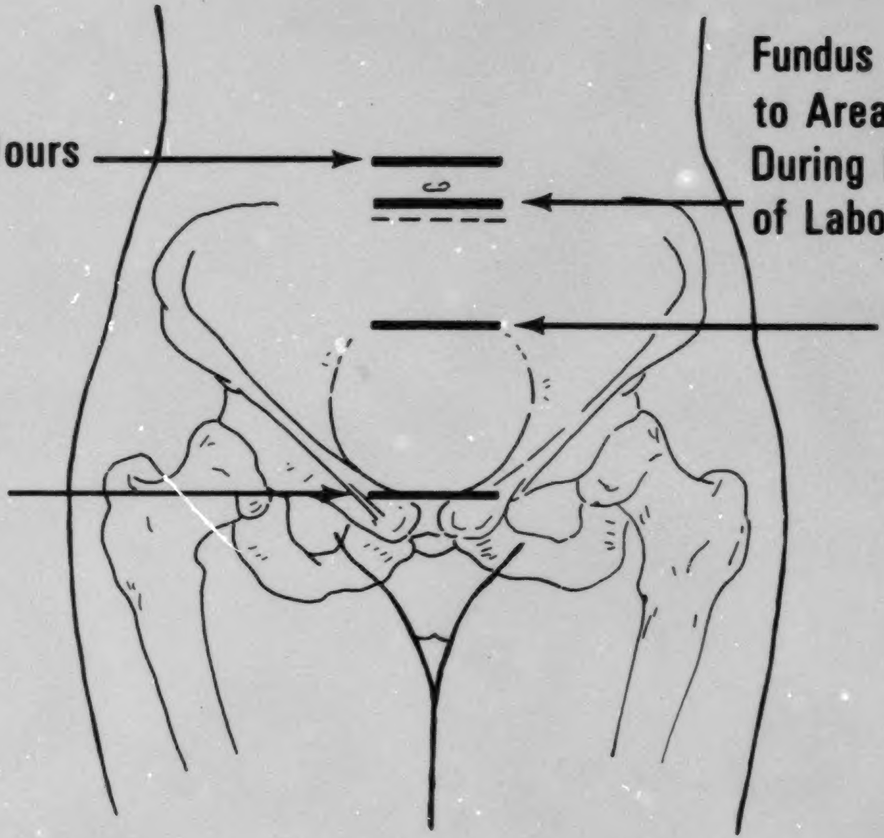
EXAMPLES: Recovery from difficult labor or delivery, recovery from general anesthesia

2. May be difficult or impossible in cases of neonate distress

EXAMPLE: Prematurity

3. May require changes in visitation policies

Uterine Involution



End of 24 Hours

Fundus of Uterus Rises to Area of Umbilicus During Fourth Stage of Labor

Fourth Day

Nonpalpable by Tenth Day

CARE OF THE POSTPARTUM PATIENT
UNIT IV

JOB SHEET #1--GIVE PERINEAL CARE

(NOTE: Perineal care may include flushing with water using perineal bottle, antiseptic solution, or a sitz bath. Perineal care of some type should be provided each time patient voids or defecates. Not only does it cleanse area, but it eases perineal discomfort. Perineal light cold packs, analgesic sprays, or ointments may also be used to provide comfort.)

I. Equipment

   A. Bedpan

   B. Tissue

   C. Perineal pads

   D. Perineal bottle

   E. Solution if not using warm tap water

II. Procedure

   A. Wash hands

   B. Assemble equipment

   C. Identify patient and explain procedure

   D. Provide privacy

   E. Use aseptic technique to change perineal pads by removing from front to back; note appearance of lochia

   (NOTE: This is a good time to remind the patient that this is the correct technique to use.)

   F. Place bedpan under patient or assist to bathroom

   G. Cleanse perineum after patient has voided or defecated by using one tissue for one cleansing stroke, always wiping from front to back

   (NOTE: If patient is able to use bathroom, instruct her in technique.)

   H. Direct stream of filled perineal bottle against perineum, flushing from front to back

   (CAUTION: To ensure that the solution is not too warm, direct the stream on the patient's inner thigh and observe reaction.)

JOB SHEET #1

I. Allow solution to run into bedpan or toilet

J. Pat inner thighs dry

K. Apply clean perineal pad from front to back

L. Provide for patient comfort

M. Remove equipment from room, clean, and replace

N. Wash hands

O. Record procedure and appearance of lochia and perineum

JOB SHEET #1

III. Checklist for giving perineal care

		Performed Well	Needs Improvement
A.	Washed hands correctly	☐	☐
B.	Assembled equipment	☐	☐
C.	Identified patient and explained procedure	☐	☐
D.	Provided for privacy	☐	☐
E.	Used aseptic technique to change perineal pads by removing from front to back, and noting appearance of lochia	☐	☐
F.	Placed bedpan under patient or assisted to bathroom	☐	☐
G.	Cleansed perineum after patient had voided or defecated by using one tissue for one cleansing stroke, always wiping from front to back	☐	☐
H.	Directed stream of filled perineal bottle against perineum, flushing from front to back (Checked temperature of solution before using)	☐	☐
I.	Allowed solution to run into bedpan or toilet	☐	☐
J.	Patted inner thighs dry and applied clean perineal pad from front to back	☐	☐
K.	Provided for patient comfort	☐	☐
L.	Removed equipment from room, cleaned, and replaced	☐	☐
M.	Washed hands correctly	☐	☐
N.	Recorded procedure and appearance of lochia and perineum	☐	☐

Comments: ____

____

____

CARE OF THE POSTPARTUM PATIENT
UNIT IV

TEST

NAME ________________________________ SCORE ______________

1. Match terms associated with postpartum care to their correct definitions. Write the correct numbers in the blanks.

_____a. Postpartum uterine discharge consisting of red and white blood cells, fatty epithelial cells, shreds of endometrium, and bacteria

_____b. Return of the uterus to its normal size following delivery

_____c. Postpartum period lasting from three to six weeks, starts at delivery and ends with the complete involution of the uterus and healing of pelvic structures

_____d. Distended or completely filled

_____e. Inducing the secretion of milk

_____f. Formation and secretion of milk

_____g. Watery, yellowish fluid, high in protein and low in carbohydrates and fats, secreted by the breasts after childbirth; acts as a laxative, which aids in expelling meconium

_____h. Temporary depression following childbirth usually appearing three days after birth; believed to be due to hormonal changes and emotional stress

_____i. Reddish discharge first four days

_____j. Brownish discharge fourth to tenth day

_____k. Yellowish or white discharge after tenth day

_____l. Slowing or cessation of flow of blood in the veins

_____m. Hormone secreted by the anterior pituitary; stimulates lactation

1. Prolactin
2. Lochia serosa
3. Involution
4. Lactogenic
5. Lochia rubra
6. Engorged
7. Lochia alba
8. Puerperium
9. Lactation
10. Lochia
11. Colostrum
12. Venous stasis
13. Postpartum "blues"

TEST

2. Describe the normal body changes in puerperium.

a. Breasts--

b. Uterus--

c. Cervix--

TEST

d. Perineal area--

e. Abdomen--

f. Urinary tract--

TEST

g. Circulatory system--

h. Hormonal function

1) Non-nursing mother--

2) Nursing mother--

i. Gastrointestinal system--

TEST

j. Emotional changes--____

____

____

____

____

____

____

____

3. State nursing responsibilities in observing the fundus and lochia.

a. Fundus

1) ____

____

2) ____

____

3) ____

____

b. Lochia

1) ____

____

2) ____

____

3) ____

____

TEST

4. Discuss considerations of the new mother's nutritional status.

TEST

5. Describe causes, symptoms, treatment, and nursing implications for postpartum complications.

Complication	Causes	Symptoms	Treatment	Nursing Implications
Hemorrhage	a. ____________	Bleeding in excess of 500 cc; rapid and/or thready pulse; decrease in blood pressure; pallor, chills, dyspnea and air hunger; restlessness; disturbed vision	Massage fundus until firm; administer oxytocic and/or vitamin K; repair lacerations if needed; replace fluid and blood if needed; may require D and C or other surgery if necessary	Observe closely and massage fundus using correct technique; *check vital signs*; administer Rx medications
Puerperal infection	Non-aseptic technique in examination or use of contaminated instruments in delivery that allow pathogenic organisms into genital tract; contact with persons with streptococci or staphylococci organisms	Foul-smelling lochia; continuous temperature over 100.4°F for two days or more excluding first twenty-four hours; chills; rapid pulse and respiration; large and tender uterus; headache; insomnia; anorexia	b. ____________	Maintain aseptic techniques; observe drainage; administer Rx medications; provide support
c. ____________	Venous stasis, clotting defects, excess fibrinogen	Chills and fever; pain in leg; leg feels hot to touch; swelling; red streaks or local inflammation in leg	Anticoagulants; prothrombin and clotting times; application of heat or cold; bed rest; antiembolism hose	Elevate leg (supporting entire leg); bedcradle over leg; DO NOT massage leg; maintain bed rest; provide emotional support
Mastitis	Infecting organism is usually hemolytic S aureous	d. ____________	Intensive antibiotic therapy, support of breast, local warm or cold packs and analgesics; if abscess develops, incision and draining must be performed	Administer antibiotics and analgesics; apply warm or cold packs, apply supportive device to breast; support mother and give encouragement

TEST

6. State actions that give support to the grieving mother and family.

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

g. ____

TEST

7. Distinguish between the advantages and disadvantages of rooming-in. Write an "A" in the blanks before advantages and a "D" in the blanks before disadvantages.

______a. Provides mother and infant with a natural mother-child relationship as soon as the mother is ready

______b. Affords opportunity for on-demand feeding

______c. May be impractical or impossible to carry out effectively if the mother is experiencing any complications

______d. Facilitates instruction of mothers and fathers in infant care

______e. May be difficult or impossible in cases of neonate distress

______f. Strengthens parent-child relationship

______g. Reduces incidence of cross-infection among infants

______h. May require changes in visitation policies

(NOTE: Test question 8 lists the job sheet. It is an important part of this test. If it has not been completed, check with your instructor.)

8. Demonstrate the ability to give perineal care.

CARE OF THE POSTPARTUM PATIENT
UNIT IV

ANSWERS TO TEST

1. a. 10
   b. 3
   c. 8
   d. 6
   e. 4
   f. 9
   g. 11
   h. 13
   i. 5
   j. 2
   k. 7
   l. 12
   m. 1

2. Descriptions should include the following

   a. Breasts

      1) Colostrum is secreted the first two or three days; then secretion of milk begins and breasts become engorged

      2) Estrogen and progesterone secreted by the placenta during pregnancy inhibit production of prolactin or lactogenic hormone

      3) Breasts may become swollen, hard, red, and painful

      4) Incomplete emptying of breast decreases milk secretion

   b. Uterus

      1) Uterus gradually becomes smaller during the period of involution and descends into the pelvic cavity; by the tenth postpartum day, it should not be palpable above the symphysis pubis

      2) Lining sloughs off and is discharged as lochia

      3) Persistent reddish color of lochia after fourth or fifth day indicates that involution is not taking place or that placental fragments have been retained

   c. Cervix

      1) Is soft, flabby, and partly open

      2) Muscle begins to regenerate and close the os after one week

      3) Small lacerations may heal spontaneously or require cauterization later

      4) External os remains somewhat wider and more slitlike

ANSWERS TO TEST

d. Perineal area

   1) Vagina recovers slowly, but muscle tone never returns to the preparous state

   2) Labia lose their cushion of fat and may become flabby

   3) Perineal tone returns slowly over a six- to eight-week period

e. Abdomen

   1) Muscles remain soft and flabby for some time

   2) Striae gradually fade to silvery white but do not disappear

   3) Separation of abdominal muscles may occur due to loss of muscle tone

   4) Multipara may experience cramping

f. Urinary tract

   1) Bladder has increased capacity; the urge to empty may be diminished due to over-distention or anesthesia and analgesics

   2) Bladder may fail to empty completely, which increases the incidence of bladder infections

   3) Urine output is greatly increased (diuresis) the first 24 to 48 hours as the body excretes fluid retained during pregnancy

   4) Distended bladder can impair involution process

g. Circulatory system

   1) Blood loss during delivery decreases blood volume

   2) Moderate anemia may occur due to blood loss

   3) White cell count increases during labor and early puerperium

   4) Fibrinogen level is elevated

   5) Pulse rate slows after delivery

   6) Diaphoresis may occur for several weeks

h. Hormonal function

   1) Non-nursing mother

      a) Ovulation occurs in three to six weeks

      b) Menstruation resumes in five to eight weeks

ANSWERS TO TEST

2) Nursing mother
    a) Return of menstrual cycle varies; may not occur until after weaning
    b) Breast-feeding is not a reliable form of contraception due to variations of hormone production

i. Gastrointestinal system
    1) Appetite for food and fluid is usually good
    2) Bowel function may be delayed due to decreased intake during labor, flaccid abdominal muscles, decreased pressure from uterus, and/or fear of pain from episiotomy or hemorrhoids
    3) Increased caloric and fluid intake is essential for the nursing mother

j. Emotional changes
    1) Need for rest and sleep is great in the immediate postpartum period
    2) Following delivery, it is not unusual for mood changes to occur frequently with little apparent cause for exhilaration or depression
    3) Mother may feel inadequate and unsure of her ability to cope with her new role
    4) Some new mothers experience depression or postpartum "blues" in varying degrees, which may be due in part to physical changes accompanying pregnancy and childbirth
    5) If symptoms of depression persist or become severe, the physician should be notified because this might indicate a more serious condition

3. a. Fundus
    1) Palpate fundus daily to determine its height
    2) Massage fundus gently as needed to keep it firm; do not massage fundus if it is already firm
    3) Report immediately if massage fails to firm fundus

b. Lochia
    1) Note color, amount, and character of lochia
    2) Reassure patient that lochia may increase when patient changes position and that this is normal and expected
    3) Instruct patient to notify the physician if lochia rubra persists after dismissal from hospital or reoccurs after lochia alba

ANSWERS TO TEST

4. Discussion should include the following
   a. Good nutrition promotes recovery, aids in resisting infection, and improves the quality and quantity of milk
   b. An additional intake of approximately 1000 calories will be needed by the nursing mother
   c. Fluid intake of 2500 to 3000 cc is essential for the nursing mother; adequate fluid intake in the non-nursing mother aids adequate urination and defecation
   d. Between-meal snacks are beneficial and may be needed to provide necessary food and fluid intake

5. a. Uterine atony; vaginal and cervical lacerations; retention of placenta fragments; multiple births; multiparity
   b. Isolate if needed; Fowler's position to promote drainage; oxytocics; antibiotics
   c. Thrombophlebitis
   d. Chills, fever, malaise, and tenderness are first symptoms; nipple fissure; infection moves to ducts; inflammation, edema, and engorgement obstruct flow of milk; may lead to breast abscess

6. a. Remember that a family coping with a handicapped infant or the loss of an infant by death or adoption requires a great deal of emotional support and understanding
   b. Provide time and place for the bereaved patient to be with her husband, family, and friends
   c. Transfer patient to another area of the hospital when indicated
   d. Encourage free expression of feelings by listening
   e. Provide information concerning the infant
   f. Do not avoid the patient and/or family because of the grief
   g. Seek assistance from clergy if needed

7. a. A
   b. A
   c. D
   d. A
   e. D
   f. A
   g. A
   h. D

8. Performance skills evaluated to the satisfaction of the instructor

CARE OF THE FULL-TERM AND PREMATURE NEONATE
UNIT V

UNIT OBJECTIVE

After completing this unit, the student should be able to care for the full-term and premature neonate. This knowledge will be shown by completing assignment sheet, job sheets, and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with the full-term neonate to their correct definitions.
2. List areas of assessment needed in the immediate care of the neonate.
3. Select from a list characteristics of the appearance of the average, full-term neonate.
4. Describe behavior of the normal, full-term neonate.
5. Describe body systems of the full-term neonate.
6. State responsibilities of the nurse in daily care of the full-term neonate.
7. Describe methods used to instruct mother in child care.
8. List advantages and disadvantages of breast-feeding.
9. State nursing responsibilities when providing circumcision care.
10. Match terms associated with the premature neonate to their correct definitions.
11. Describe characteristics of the premature neonate.
12. List common maternal, fetal, and placental conditions which predispose to premature birth.
13. Select from a list characteristics of the appearance of the premature neonate.
14. Describe problems, causes, complications, and nursing responsibilities associated with prematurity.
15. State actions of nurse in giving emotional support to parents of premature neonate.
16. Assess neonate.

OBJECTIVE SHEET

17. Demonstrate the ability to

    a. Hold infant.

    b. Bathe neonate.

    c. Prepare and give formula feedings.

    d. Assist with breast-feeding.

CARE OF THE FULL-TERM AND PREMATURE NEONATE
UNIT V

SUGGESTED ACTIVITIES

I. Suggested activities

- A. Order materials planned to supplement unit
    1. Filmstrips

       (NOTE: The following filmstrips are available from Trainex Corporation, P.O. Box 116, Garden Grove, California 92642.)

        - a. *Bathing Your Baby.*
        - b. *Bottle-Feeding Your Baby.*
        - c. *Nursing Care of the Newborn: Introduction to Newborn Nursing.*
        - d. *Nursing Care of the Newborn: First 12 Hours of Life.*
        - e. *Breast-Feeding Your Baby.*
    2. Pamphlet--"Breast-Feeding and the Obstetrical Nurse." La Leche League International, Inc., 9616 Minneapolis Avenue, Franklin Park, Illinois 60131.
    3. Charts
        - a. "Premature Infant Notebook Chart." Ross Laboratories, Educational Services Department 441, 625 Cleveland Avenue, Columbus, Ohio 43216.
        - b. "Newborn Chart." Ross Laboratories, Educational Services Department 441, 625 Cleveland Avenue, Columbus, Ohio 43216.
- B. Provide students with objective sheet.
- C. Discuss unit and specific objectives.
- D. Provide students with information, assignment, and job sheets.
- E. Discuss information and assignment sheets.
- F. Demonstrate and discuss procedures outlined in the job sheets.
- G. Use models of infants to compare sizes of average full-term and premature neonates.
- H. Use charts to compare full-term infant to premature infant.
- I. Discuss procedures for care of full-term and premature neonates in the facility.
- J. Obtain flow sheets on chart form used in your hospital to help students become familiar with format.

SUGGESTED ACTIVITIES

- K. Give test.
- L. Reteach if necessary.

II. Instructional materials

- A. Objective sheet
- B. Suggested activities
- C. Information sheet
- D. Assignment Sheet #1--Assess Neonate
- E. Job sheets
  1. Job Sheet #1--Hold Infant
  2. Job Sheet #2--Bathe Neonate
  3. Job Sheet #3--Prepare and Give Formula Feedings
  4. Job Sheet #4--Assist with Breast-Feeding
- F. Test
- G. Answers to test

III. Unit references

A. Anderson, Barbara G., and Pamela J. Shapiro. *Obstetrics for the Nurse.* Albany, New York: Delmar Publishers, 1972.

B. Jensen, Margaret Duncan, Ralph Benson, Irene M. Bobak, *Maternity Care: The Nurse and the Family.* St. Louis: The C.V. Mosby Company, 1977.

CARE OF THE FULL-TERM AND PREMATURE NEONATE
UNIT V

INFORMATION SHEET

I. Terms and definitions associated with the full-term neonate

   A. Anterior fontanel--Opening at point of union of frontal, sagittal, and coronal sutures

   B. Fontanel--Membranous space between cranial bones in fetal life and infancy

   C. Hydrocephaly--Abnormal condition caused by an increase in volume of cerebrospinal fluid within skull

   D. Hyperbilirubinemia--Excessive amount of bilirubin in blood; severe and prolonged physiological jaundice; sometimes seen in premature infant

   E. Intracranial--Within cranium or skull

   F. Microcephaly--Abnormal smallness of head

   G. Milia--Minute epidermal cysts (singular--*milium*)

   H. Mongolian spot--Bluish-gray discoloration of skin on lower back; present at birth but usually fades by school age

   I. Neonate--Newborn infant up to four weeks of age

   J. Posterior fontanel--Opening at point of union of lambdoid and sagittal sutures

   K. Regurgitation--Return of food from stomach to mouth

II. Areas of assessment needed in the immediate care of the neonate (Assignment Sheet #1)

   (NOTE: Physician will usually completely assess neonate within twenty-four hours after delivery. The nurse needs to be able to make pertinent observations and note these in infant's chart for further assessment as soon as neonate is admitted to the nursery.)

   A. Posture

      (NOTE: Neonate will assume a position similar to the position seen at birth. Curvatures, spinal defects, or dimples may be observed.)

   B. Skin

   C. Chest

   D. Genitals

   E. Abdomen

INFORMATION SHEET

F. Trunk and extremities

(NOTE: When the index finger is used to palpate movement of a joint, a click may be heard if a dislocation is present.)

G. Activity and neurological responses

(NOTE: These include all of the reflex responses.)

H. Weight and length

I. Blood and urine values

III. Characteristics of the appearance of the average, full-term neonate

A. Average length of the neonate is 19 to 21 1/2 inches (48 to 54.5 cm)

B. Average weight is 6 to 8 1/2 pounds or 2700 to 3850 grams (2.7 to 3.85 kg)

(NOTE: Weight loss of 6 to 10 ounces (186 to 310 gm) during first few days after birth is due to withdrawal of maternal hormones, loss of fluid, loss of meconium and urine, and limited intake.)

C. Head is large in proportion to rest of body, measuring a circumference of 13.2 to 14.8 inches (33.5 to 37.5 cm)

(NOTE: If circumference is over 14.8 inches [37.5 cm], infant may be hydrocephalic; if under 13.2 inches [35 cm], infant may be premature or microcephalic.)

D. Anterior and posterior fontanels bulge when neonate cries or strains or when intracranial pressure is increased; they may appear depressed due to dehydration

(NOTE: The anterior fontanel closes between twelve and eighteen months; the posterior fontanel is smaller than the anterior and closes by end of second month.)

E. Measurement of chest is same as abdomen at birth

(NOTE: At two years, the chest measurement should exceed circumference of head.)

F. Color of neonate ranges from pink to bright pink and becomes red when infant cries

G. Tissue turgor is good

H. Lanugo will be most noticeable on shoulders and back

I. Vernix caseosa varies from very little to complete, thick covering

J. Marks and blemishes may appear as bruises on head or scalp in cephalic presentations, on buttocks or genitalia in breech presentations; forceps marks or milia may also be present

INFORMATION SHEET

K. Congenital skin blemishes or birthmarks may appear as reddened areas on the skin that may or may not be elevated and may disappear spontaneously

(NOTE: There are several types of birthmarks. Telangiectasia or *stork bites* usually disappear during infancy. The more pronounced hemangiomas or *strawberry marks* or *port wine stains* may be disfiguring and difficult to treat.)

L. Mongolian spots may appear but should slowly fade

IV. Behavior of the normal, full-term neonate

A. Activity

1. Cries lustily and kicks or moves vigorously

2. Sucks often, even when not eating

3. Lies in fetal position

B. Sensory system

(NOTE: The nervous system is complete but not well developed.)

1. Heat-regulating mechanism unstable for first seven to ten days

2. Vision limited to seeing lights and bright objects

3. Hearing acute; infant is startled by loud noises

C. Reflex behavior

1. Sucking, swallowing, rooting, and cough or gag reflexes are present and are essential for gaining nourishment

2. Ability to grasp is an indication of strength and alertness

(NOTE: Active Moro reflex occurs when the infant is startled, usually by a loud noise or a sudden jarring of the bed or table on which infant is lying. The infant responds by throwing arms out to the side and drawing up legs. Absence of Moro reflex may indicate brain damage.)

3. Assumption of tonic neck position

(NOTE: Most neonates turn the head to one side, extend the arm on the same side, and flex the other arm in a fencing position.)

V. Body systems of the full-term neonate

A. Respiratory

1. Breathing is quiet and shallow, using mainly the diaphragm and abdominal muscles; rate is thirty to eighty respirations per minute

(NOTE: Sucking in or retraction of the chest wall in rib or sternal area on inspiration is an indication of respiratory distress.)

INFORMATION SHEET

2. Character and rhythm vary with activity

B. Cardiovascular

1. Heart rate is 120 to 180 beats per minute; apical pulse is more accurate than radial

2. Blood does not circulate freely to the extremities, so feet and hands may be blue or feel cool

3. Blood pressure is usually below 100 and is difficult to obtain

4. Prothrombin level is low

5. Surplus red blood cells are destroyed, resulting in hyperbilirubinemia, which temporarily tints the skin

(NOTE: This condition is called physiological jaundice and usually occurs during the third to seventh day after birth.)

C. Temperature

1. Temperature regulation is unstable; temperature drops rapidly after birth to approximately 96°F

2. During the first twelve hours, temperature gradually rises to 98°F or 99°F and stabilizes

(NOTE: Neonates can be assisted in temperature stabilization by placing them in an incubator or by covering their heads. Overheating should be avoided because the neonate does not perspire effectively.)

D. Gastrointestinal

1. Neonate is capable of digesting proteins, fats, and carbohydrates in mother's milk or formulas

2. Meconium should be passed within first twenty-four hours; if no stool is passed, malformation of digestive tract is suspected

(NOTE: Transitional stools, passed after the infant receives milk, are first yellow-green then brown. Stools of formula-fed babies are lemon yellow and have the appearance of curds. Stools of breast-fed babies are orange-yellow and are usually softer and more frequent.)

E. Urinary

1. First voiding may not occur for twenty-four hours, although urine is usually in bladder at birth

(NOTE: Urine of the neonate contains relatively large amounts of uric acid, which may crystallize out of voided urine, causing a brick-red stain on the diaper.)

INFORMATION SHEET

2. Infant has ample fluid in the tissues and usually does well without fluids the first few hours

3. Kidneys are limited in their ability to respond to an abnormal fluid balance; therefore, edema or dehydration may occur rapidly

F. Endocrine

1. Maternal hormones cross the placental barrier and may cause swelling of the breasts in either sex, breast secretion in either sex, pseudo menstruation in female, and white mucoid vaginal discharge in female

2. Genitalia of both male and female may be swollen; breech infants may have discoloration as well

3. Foreskin may adhere to glans penis

VI. Responsibilities of the nurse in daily care of the full-term neonate

A. Protect neonate by maintaining aseptic technique and by using separate equipment for each infant

(CAUTION: Never leave an infant unattended.)

B. Document observations of neonate's activities

EXAMPLES: Color, cry, respiration, temperature to touch, elimination of urine and stool, sleeping, activity level, weight, feeding behavior and patterns; signs of infant distress such as increased respiratory rate or difficulty, excessive mucus or drooling, vomiting, condition of cord, jaundice, rash, blemishes, or marks

C. Provide physical care of newborn as indicated or needed (Job Sheets #1-#3)

EXAMPLES: Bath, clothing change, temperature check by thermometer, cleansing of cord, removal of cord clamp after twenty-four hours, care of circumcision when present, diaper changes as needed with cleansing, breast or formula feeding, test for PKU

D. Handle infants gently but firmly; always provide support for head and neck

E. Avoid sudden movements and loud noises

F. Provide a sense of security and safety in carrying infant

G. Touch and talk to infant when you give care

INFORMATION SHEET

VII. Methods used to instruct mother in child care

(NOTE: If mother has never attended child-care classes or if she needs a review of some child-care techniques, the nurse should be able to help her learn these skills.)

A. Resource materials

1. Obtain pamphlets on feeding, bathing, and diapering techniques; listen for any questions
2. Use audio-visual equipment to help teach mother some of the basic skills; answer any questions

B. Demonstrations

1. Bring baby to mother; demonstrate skills and answer questions; then allow mother to perform skills the next time
2. Bring a group of mothers and fathers together to demonstrate skills, using an infant from the nursery

VIII. Advantages and disadvantages of breast-feeding

A. Advantages

1. Requires little preparation; is convenient
2. Stimulates secretion of oxytocic hormone in mother
3. Provides pleasure for mother and infant
4. Breast milk is more easily digested by infant than cow's milk or formula
5. Breast milk may increase infant's resistance to respiratory and gastrointestinal infection
6. Breast milk is free from harmful bacteria
7. Breast milk causes fewer allergic reactions in infant than does cow's milk or formula

B. Disadvantages

1. May be too confining for mother
2. Transmits certain drugs through the milk

   (NOTE: These might include diuretics, steroids, reserpine, coumarin, antithyroid drugs, and some chemotherapeutic agents.)

3. Contraindicated in some communicable diseases such as syphilis, tuberculosis, and other highly contagious diseases

INFORMATION SHEET

IX. Nursing responsibilities when providing circumcision care

  A. Observe neonate frequently for bleeding, swelling of the incision or penis, and urinary retention

  B. Keep area clean; change dressings as necessary

  C. Place infant on side rather than on abdomen

X. Terms and definitions associated with the premature neonate

  A. Anomaly--Any deviation from the usual in form, structure, or location; abnormality or malformation

  B. Audio--Pertaining to hearing

  C. Eruct--Belch

  D. Gavage--Administration of nourishment through a nasogastric tube

  E. Herpes Type II--Acute viral infection characterized by groups of vesicles surrounded by reddened skin area; highly contagious

  F. Hyaline membrane disease--Disorder of alveoli and respiratory passages that causes inadequate expansion of lungs

  G. Premature neonate--Infant born before the end of the thirty-seventh week of gestation

  (NOTE: The premature infant is one who is born earlier, smaller, and physically less mature than the full-term infant.)

  H. Stupor--Condition characterized by marked decrease of response to stimuli

  I. Tactile--Pertaining to sense of touch

  J. Toxoplasmosis--Type of protozoon infection which may be transmitted from mother to fetus in utero or at birth

XI. Characteristics of premature neonate

(NOTE: Infants born after gestation of thirty-seven weeks but with birth weight of 2500 grams or less are usually termed *low-birth-weight infants* rather than *premature*.)

  A. Birth weight less than 2500 grams or 5 1/2 pounds

  B. Gestation of less than thirty-seven weeks

  C. Lack of physical development

INFORMATION SHEET

XII. Common maternal, fetal, and placental conditions which predispose to premature birth

A. Maternal

1. Severe malnutrition
2. Severe anemia
3. Alcoholism or other drug use
4. Excessive smoking
5. Maternal age

   EXAMPLES: Very young or middle-aged

6. Preeclampsia
7. Multiple pregnancies or multiple births
8. Lack of prenatal care
9. Closely spaced pregnancies
10. Previous aborted pregnancies
11. Physical or emotional stress
12. Diabetes or other endocrine disturbances

B. Fetal

1. Anomalies in development
2. Anemia
3. Maternal infections transmitted to fetus

   EXAMPLES: Rubella, syphilis, herpes type II, toxoplasmosis, acute bacterial infections

C. Placental

1. Anomalies in development
2. Chronic placental deficiencies
3. Placenta previa or abruptio placentae

XIII. Characteristics of the appearance of the premature neonate

A. Skin is reddish pink and translucent with poor turgor

B. Extremities are thin with little muscle or subcutaneous tissue

INFORMATION SHEET

C. Head and abdomen are large in proportion to body

D. Soles of feet are smooth

E. Superficial veins of abdomen and scalp are prominent

F. Lanugo is plentiful and widely distributed over back, shoulders, and extremities

G. Muscular and skeletal systems are immature

H. In male, scrotum is small with few rugae

I. In female, labia majora is widely separated by protruding labia minora and clitoris

INFORMATION SHEET

XIV. Problems, causes, complications, and nursing responsibilities associated with prematurity

(NOTE: The nursing care given a premature infant depends greatly upon the infant's physical condition and the equipment available.)

PROBLEM	CAUSES	COMPLICATIONS	NURSING RESPONSIBILITIES
Respiratory distress	Immature development; weak gag and cough reflexes; anomalies; oversedation of mother; birth trauma; atelectasis; hyaline membrane disease; respiratory infection	Pneumonias, serious upper respiratory infections	Maintain oxygen and humidity at prescribed levels (O_2 concentration should not exceed 40 percent, and humidity should be 60 percent or more); observe respiratory functions and be able to use monitor system; maintain careful, continued, recorded observations of the infant
Instability of body temperature	Immature temperature-regulating center; lower heat production due to inactivity; small amounts of subcutaneous fat in relation to body surface	Decreased circulation; shock	Maintain constant temperature and humidity to help stabilize infant's temperature; check axillary temperature and maintain between 96°F and 98°F
Inadequate nutrition	Immature digestive system; weak sucking, swallowing, and gag reflexes; faulty absorption of nutrients	Aspiration; inadequate intake; abdominal distention; vomiting or regurgitation; dehydration; respiratory distress due to overfeeding	Provide adequate nutrition and fluids via IV, gavage, or bottle feedings; feed very small amounts at one time; monitor and measure I and O accurately; observe character and frequency of stools; weigh infant at same time each day
Fatigue	Constant handling, and moving of infant; lack of O_2; chilling	Exhaustion; respiratory or cardiac distress; GI distress; shock	Handle infant gently, avoid loud noises and jarring of the isolette; change position of infant periodically

INFORMATION SHEET

XV. Actions of nurse in giving emotional support to parents of premature neonate

A. Allow husband and wife to remain together as much as possible

B. Provide information concerning the infant and care needed

C. Recognize that parents' fears and anxieties are natural, normal, and acceptable behavior

D. Permit parents to observe infant as often and as much as is practical

(NOTE: If the mother is unable to go to the nursery, keep her informed of the baby's condition.)

E. Provide opportunity for parents to ask questions and receive instructions concerning infant care

F. Permit physical contact with infant when appropriate

G. Allow parents to participate in infant care during mother's hospitalization and after her discharge

H. Provide individualized care instructions for parents before infant is to be discharged

EXAMPLES: Special needs and how to meet them, actual care of infant in nursery with assistance of nurse, person to contact for assistance or advice after taking infant home

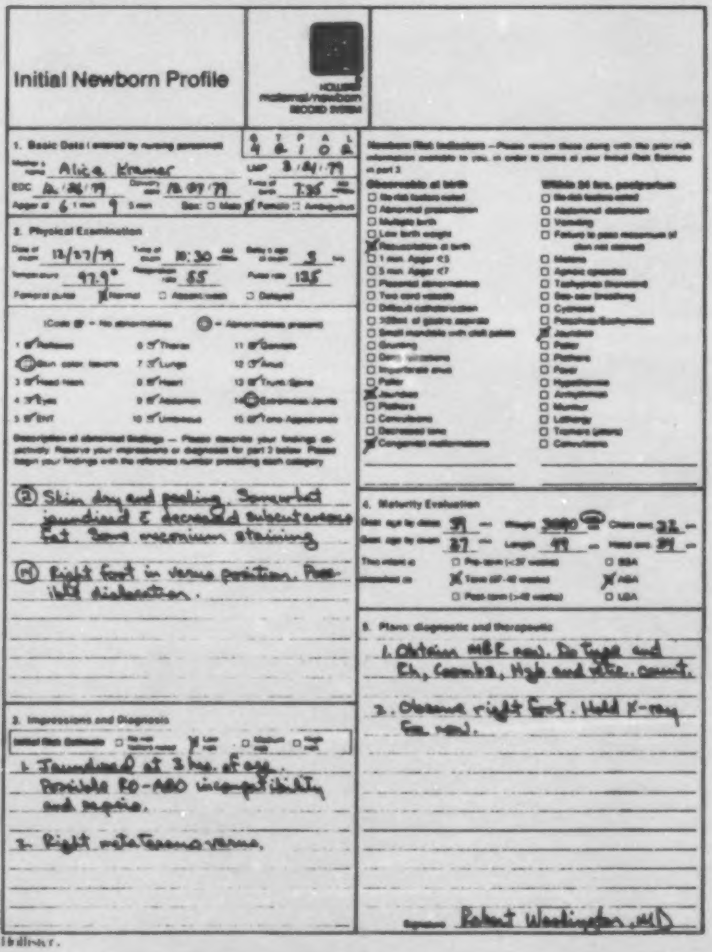
CARE OF THE FULL-TERM AND PREMATURE NEONATE
UNIT V

ASSIGNMENT SHEET #1--ASSESS NEONATE

NAME ______________________________ SCORE ______________

The nurses's initial assessment of the neonate can assist in identifying any problem areas that would be of concern to the physician when he or she completes the complete assessment of the infant. Many types of forms can be used to document this data, but most forms contain the same types of information. Use the two forms following the example to assess two neonates in your hospital's nursery. Turn in to instructor for evaluation.

EXAMPLE:



Initial Newborn Profile

1. Basic Data

G T P A L
4 2 1 0 2

Alice Kramer
LMP 3/4/79
EDC 12/26/79 12/27/79 7:35
Apgar 6 9
Sex: ☐ Male ☒ Female ☐ Ambiguous

2. Physical Examination

12/27/79 10:30 3
97.9° 55 135

② Skin dry and peeling. Somewhat jaundiced ē decreased subcutaneous fat. Some meconium staining

⑭ Right foot in varus position. Possible dislocation.

3. Impressions and Diagnosis

1. Jaundiced at 3 hrs. of age. Possible RO-ABO incompatibility and sepsis.
2. Right metatarsus varus.

4. Maturity Evaluation

39 3090 32
37 49 34

5. Plans: diagnostic and therapeutic

1. Obtain MBF now. Do Type and Rh, Coombs, Hgb and retic. count.
2. Observe right foot. Hold X-ray for now.

Robert Washington, MD

Hollister

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274-C

ASSIGNMENT SHEET #1

NEWBORN #1

Initial Newborn Profile

HOLLISTER®
maternal/newborn
RECORD SYSTEM

1. Basic Data (entered by nursing personnel)

G T P A L

Mother's name ____________________
LMP mo / day / yr ________
EDC mo / day / yr ________
Delivery date mo / day / yr ________
Time of birth ________ AM PM
Apgar at 1 min 5 min
Sex: ☐ Male ☐ Female ☐ Ambiguous

2. Physical Examination

Date of exam ________
Time of exam ________ AM PM
Baby's age at exam ________ hrs.
Temperature ________
Respiration rate ________
Pulse rate ________
Femoral pulse ☐ Normal ☐ Absent/weak ☐ Delayed

(Code ☑ = No abnormalities (☐) = Abnormalities present)

1 ☐ Reflexes
2 ☐ Skin: color, lesions
3 ☐ Head/Neck
4 ☐ Eyes
5 ☐ ENT
6 ☐ Thorax
7 ☐ Lungs
8 ☐ Heart
9 ☐ Abdomen
10 ☐ Umbilicus
11 ☐ Genitals
12 ☐ Anus
13 ☐ Trunk/Spine
14 ☐ Extremities/Joints
15 ☐ Tone/Appearance

Description of abnormal findings — Please describe your findings objectively. Reserve your impressions or diagnoses for part 3 below. Please begin your findings with the reference number preceding each category.

3. Impressions and Diagnosis

Initial Risk Estimate ☐ No risk factors noted ☐ Low risk ☐ Medium risk ☐ High risk

Newborn Risk Indicators — Please review these along with the prior risk information available to you, in order to arrive at your Initial Risk Estimate in part 3.

Observable at birth
- ☐ No risk factors noted
- ☐ Abnormal presentation
- ☐ Multiple birth
- ☐ Low birth weight
- ☐ Resuscitation at birth
- ☐ 1 min. Apgar <5
- ☐ 5 min. Apgar <7
- ☐ Placental abnormalities
- ☐ Two cord vessels
- ☐ Difficult catheterization
- ☐ >20ml. of gastric aspirate
- ☐ Small mandible with cleft palate
- ☐ Grunting
- ☐ Deep retractions
- ☐ Imperforate anus
- ☐ Pallor
- ☐ Jaundice
- ☐ Plethora
- ☐ Convulsions
- ☐ Decreased tone
- ☐ Congenital malformations

Within 24 hrs. postpartum
- ☐ No risk factors noted
- ☐ Abdominal distension
- ☐ Vomiting
- ☐ Failure to pass meconium (if skin not stained)
- ☐ Melena
- ☐ Apneic episodes
- ☐ Tachypnea (transient)
- ☐ See-saw breathing
- ☐ Cyanosis
- ☐ Petechiae/Ecchymoses
- ☐ Jaundice
- ☐ Pallor
- ☐ Plethora
- ☐ Fever
- ☐ Hypothermia
- ☐ Arrhythmias
- ☐ Murmur
- ☐ Lethargy
- ☐ Tremors (jitters)
- ☐ Convulsions

4. Maturity Evaluation

Gest. age by dates ________ wks
Weight ________ lbs. gms
Chest circ. ________ cm
Gest. age by exam ________ wks
Length ________ cm
Head circ. ________ cm

This infant is classified as:
☐ Pre-term (<37 weeks)
☐ Term (37-42 weeks)
☐ Post-term (>42 weeks)
☐ SGA
☐ AGA
☐ LGA

5. Plans: diagnostic and therapeutic

Signature: ____________________

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ASSIGNMENT SHEET #1

NEWBORN #2

Initial Newborn Profile

HOLLISTER®
maternal/newborn
RECORD SYSTEM

1. Basic Data (entered by nursing personnel)

G T P A L

Mother's name ________ LMP mo / day / yr ________

EDC mo / day / yr ________ Delivery date mo / day / yr ________ Time of birth ________ AM PM

Apgar at: 1 min 5 min Sex: ☐ Male ☐ Female ☐ Ambiguous

2. Physical Examination

Date of exam ________ Time of exam ________ AM PM Baby's age at exam ________ hrs.

Temperature ________ Respiration rate ________ Pulse rate ________

Femoral pulse: ☐ Normal ☐ Absent/weak ☐ Delayed

(Code ☑ = No abnormalities ⊡ = Abnormalities present)

1 ☐ Reflexes
2 ☐ Skin: color, lesions
3 ☐ Head/Neck
4 ☐ Eyes
5 ☐ ENT
6 ☐ Thorax
7 ☐ Lungs
8 ☐ Heart
9 ☐ Abdomen
10 ☐ Umbilicus
11 ☐ Genitals
12 ☐ Anus
13 ☐ Trunk/Spine
14 ☐ Extremities/Joints
15 ☐ Tone/Appearance

Description of abnormal findings — Please describe your findings objectively. Reserve your impressions or diagnoses for part 3 below. Please begin your findings with the reference number preceding each category.

3. Impressions and Diagnosis

Initial Risk Estimate ☐ No risk factors noted ☐ Low risk ☐ Medium risk ☐ High risk

Newborn Risk Indicators — Please review these along with the prior risk information available to you, in order to arrive at your Initial Risk Estimate in part 3.

Observable at birth

- ☐ No risk factors noted
- ☐ Abnormal presentation
- ☐ Multiple birth
- ☐ Low birth weight
- ☐ Resuscitation at birth
- ☐ 1 min. Apgar <5
- ☐ 5 min. Apgar <7
- ☐ Placental abnormalities
- ☐ Two cord vessels
- ☐ Difficult catheterization
- ☐ >20ml. of gastric aspirate
- ☐ Small mandible with cleft palate
- ☐ Grunting
- ☐ Deep retractions
- ☐ Imperforate anus
- ☐ Pallor
- ☐ Jaundice
- ☐ Plethora
- ☐ Convulsions
- ☐ Decreased tone
- ☐ Congenital malformations

Within 24 hrs. postpartum

- ☐ No risk factors noted
- ☐ Abdominal distension
- ☐ Vomiting
- ☐ Failure to pass meconium (if skin not stained)
- ☐ Melena
- ☐ Apneic episodes
- ☐ Tachypnea (transient)
- ☐ See-saw breathing
- ☐ Cyanosis
- ☐ Petechiae/Ecchymoses
- ☐ Jaundice
- ☐ Pallor
- ☐ Plethora
- ☐ Fever
- ☐ Hypothermia
- ☐ Arrhythmias
- ☐ Murmur
- ☐ Lethargy
- ☐ Tremors (jitters)
- ☐ Convulsions

4. Maturity Evaluation

Gest. age by dates ________ wks Weight ________ lbs gm Chest circ. ________ cm

Gest. age by exam ________ wks Length ________ cm Head circ. ________ cm

This infant is classified as: ☐ Pre-term (<37 weeks) ☐ Term (37-42 weeks) ☐ Post-term (>42 weeks) ☐ SGA ☐ AGA ☐ LGA

5. Plans: diagnostic and therapeutic

Signature: ________

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CARE OF THE FULL-TERM AND PREMATURE NEONATE
UNIT V

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

CARE OF THE FULL-TERM AND PREMATURE NEONATE
UNIT V

JOB SHEET #1--HOLD INFANT

I. Needed items

  A. Nurse

  B. Infant

II. Procedure for the traditional cradle hold

  A. Wash hands

  B. Pick up infant; support infant's head and back

  C. Cradle child's head in your elbow

  D. Reach your forearm around the outside of the infant's body to grasp the outer leg

  E. Use other hand to support back and buttocks or to provide needed care (Figure 1)

FIGURE 1

JOB SHEET #1

III. Procedure for football hold

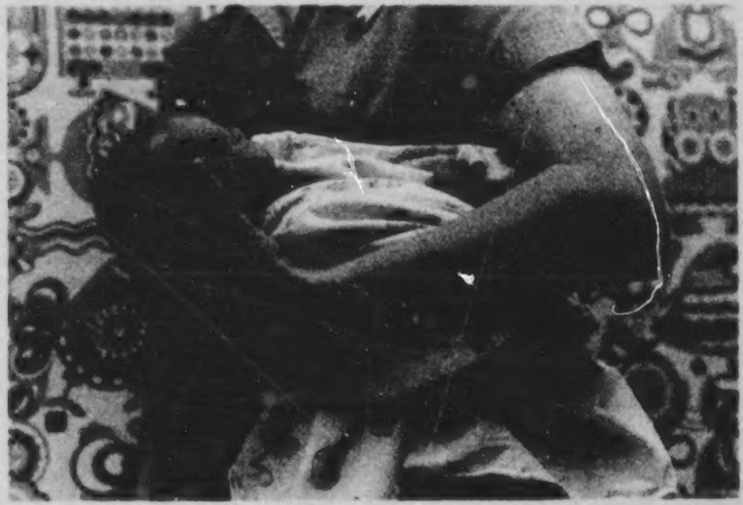
A. Wash hands

B. Pick infant up; support infant's head and back

C. Support length of the baby's body with forearm, with infant's head and neck resting on hand

D. Hold lower portion of the infant's body, legs, and buttocks between elbow and hip (Figure 2)

FIGURE 2



JOB SHEET #1

IV. Procedure for shoulder hold

A. Wash hands

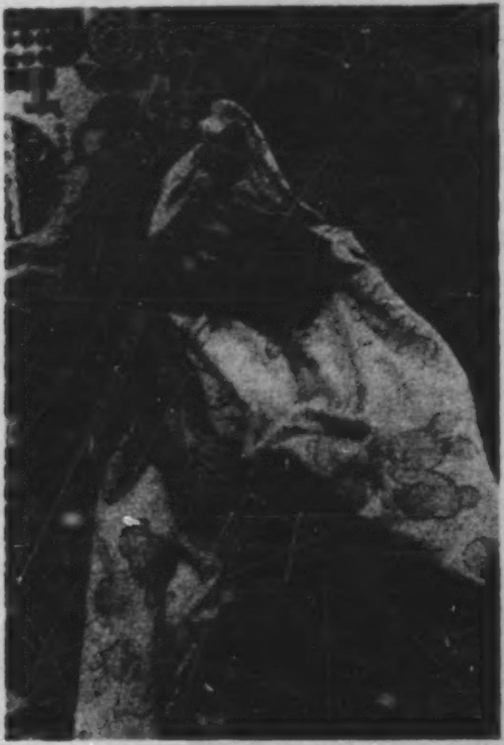
B. Place clean, soft cloth on shoulder

C. Pick up infant; support head and back

D. Hold infant upright against the chest and shoulder with one hand or forearm supporting infant's buttocks

E. Support infant's back and buttocks with the other hand (Figure 3)

FIGURE 3



JOB SHEET #1

V. Checklist for cradle hold

		Performed Well	Needs Improvement
A.	Washed hands	☐	☐
B.	Picked up infant; supported the head and back	☐	☐
C.	Cradled child's head in elbow	☐	☐
D.	Reached forearm around the outside of infant's body and grasped the outer leg	☐	☐
E.	Used other hand to support the back and buttocks or to provide needed care	☐	☐

Comments: ______________________________

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VI. Checklist for football hold

		Performed Well	Needs Improvement
A.	Washed hands	☐	☐
B.	Picked infant up; supported infant's head and back	☐	☐
C.	Supported length of the baby's body with forearm, with infant's head and neck resting on hand	☐	☐
D.	Held lower portion of infant's body, legs, and buttocks between elbow and hip	☐	☐

Comments: ______________________________

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JOB SHEET #1

VII. Checklist for shoulder hold

		Performed Well	Needs Improvement
A.	Washed hands	☐	☐
B.	Placed clean, soft cloth on shoulder	☐	☐
C.	Picked up infant; supported head and back	☐	☐
D.	Held infant upright against the chest and shoulder with one hand or forearm supporting infant's buttocks	☐	☐
E.	Supported infant's back and buttocks with the other hand	☐	☐

Comments: ____

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CARE OF THE FULL-TERM AND PREMATURE NEONATE
UNIT V

JOB SHEET #2--BATHE NEONATE

(CAUTION: Keep infant warm throughout procedure.)

I. Equipment

   A. Basin of warm water

   B. Mild soap, lotion soap, or antibacterial solution

   C. Washcloth

   D. Two towels or other soft cloths for covering and drying

   E. Aspiration bulb

   F. Sterile cotton balls

   G. Antispetic solution

   H. Sterile applicators

   I. Clothing

II. Procedure

   A. Wash your hands

   B. Cleanse infant's eyes if necessary

      1. Moisten cotton ball with sterile water

      2. Wipe eye from inner canthus to outside; discard cotton ball

      3. Wipe second eye in same manner

   C. Wash infant's face, if needed; use water but not soap

   D. Check nostrils; clean with water-moistened cotton twists as needed

   E. Cleanse external ears as necessary with cotton balls

   F. Wash head gently with soap and water; rinse and pat dry

   (NOTE: A football hold for the baby is best for this procedure.)

   G. Continue bath by washing, rinsing, and drying the neck, chest, arms, hands, abdomen, and back

   (NOTE: Some physicians prefer that not all the vernix be removed, but all traces of blood or meconium should be.)

JOB SHEET #2

H. Put garment on infant; turn garment up to be out of the way as the bath is completed

I. Wash legs, feet, and then the buttocks and perineal region

J. Wash your hands

K. Apply antiseptic to cord end and to the skin surrounding the base of the cord; use sterile applicators

L. Inspect and cleanse genitalia

   1. On female infant, cleanse from front to back between labia; use one cotton ball for each stroke

   2. On male infants, retract foreskin gently unless contraindicated and clean the glans; replace foreskin immediately

M. Diaper infant

N. Check identification band with identification card on crib

O. Place infant in prepared crib or incubator

P. Place infant on side; prop as necessary to maintain position

(NOTE: Do not place infant on his or her back.)

Q. Cover lightly as needed

R. Record all pertinent observations

   1. Temperature
   2. Voiding
   3. Stool
   4. Color
   5. Cry
   6. Respirations

(NOTE: This same procedure is followed for daily care.)

JOB SHEET #2

III. Checklist for bathing neonate

		Performed Well	Needs Improvement
A.	Washed hands correctly	☐	☐
B.	Cleansed infant's eyes correctly	☐	☐
C.	Washed infant's face, if needed; used water but not soap	☐	☐
D.	Checked nostrils; cleaned with water-moistened cotton twists as needed	☐	☐
E.	Cleansed external ears as necessary with cotton balls	☐	☐
F.	Washed head gently with soap and water; rinsed and patted dry	☐	☐
G.	Continued bath by washing, rinsing, and drying the neck, chest, arms, hands, abdomen, and back	☐	☐
H.	Put garment on infant; turned garment up to be out of the way as bath was completed	☐	☐
I.	Washed legs, feet, then buttocks and perineal region	☐	☐
J.	Washed hands; applied antiseptic to cord end and to skin surrounding base of cord; used sterile applicators	☐	☐
K.	Inspected and cleansed genitals correctly	☐	☐
L.	Diapered infant, checked ID band with identification card on crib, and placed infant in crib or incubator	☐	☐
M.	Placed infant on side; propped as necessary to maintain position; covered lightly	☐	☐
N.	Recorded all pertinent observations	☐	☐

Comments: ____

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CARE OF THE FULL-TERM AND PREMATURE NEONATE
UNIT V

JOB SHEET #3–PREPARE AND GIVE FORMULA FEEDINGS

I. Equipment

A. Bottle of formula at room temperature

(NOTE: Physician will order type of formula to be given.)

B. Towel or pad

II. Procedure

A. Wash hands

B. Prepare bottle of formula by securing nipple and testing rate of flow

(NOTE: Rate of flow from the nipple should be almost one drop per second. Nipple holes may have to be enlarged. Weak or easily fatigued infants will require larger nipple holes and/or softer nipples.)

C. Hold infant with head and upper body slightly elevated; this position minimizes the possibility of aspiration and the flow of liquid into the eustachian tube (Figure 4)

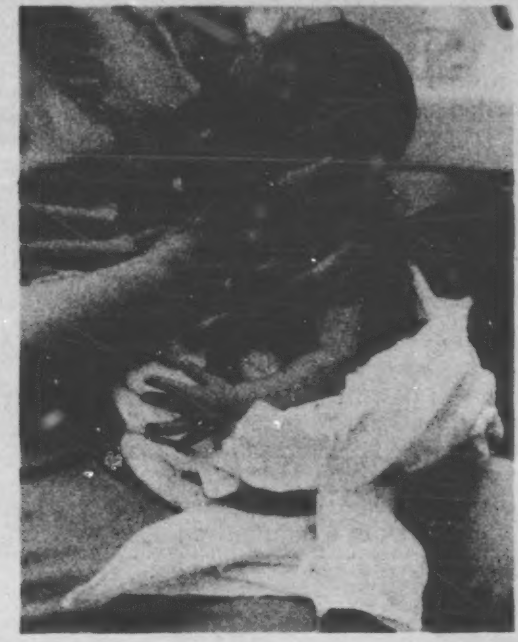
FIGURE 4

D. Tip bottle so that there is always fluid in the nipple and neck, to lessen air swallowing

JOB SHEET #3

E. Hold infant in an upright position against shoulder or in a sitting position on lap and gently rub back to help expel any swallowed air (Figure 5)

FIGURE 5



F. Observe closely during and between feedings for signs of respiratory or gastrointestinal distress

G. Cleanse infant as needed and place in crib on right side or abdomen

H. Check to see how much formula was taken and record

JOB SHEET #3

III. Checklist for preparing and giving formula feedings

		Performed Well	Needs Improvement
A.	Washed hands; prepared bottle of formula be securing nipple and testing rate of flow	☐	☐
B.	Held infant with head and upper body slightly elevated	☐	☐
C.	To lessen air swallowing tipped bottle sot that there was always fluid in nipple and neck	☐	☐
D.	Held infant in an upright position against shoulder or sitting position on lap and gently rubbed back to help expel any swallowed air	☐	☐
E.	Observed closely during and between feedings for signs of respiratory or gastrointestinal distress	☐	☐
F.	Cleansed infant as needed and placed in crib on right side or abdomen	☐	☐
G.	Checked to see how much formula was taken and recorded	☐	☐

Comments: ____

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CARE OF THE FULL-TERM AND PREMATURE NEONATE
UNIT V

JOB SHEET #4--ASSIST WITH BREAST-FEEDING

I. Equipment

A. Prepackaged towels

B. Antiseptic solution

II. Procedure

A. Identify patient and infant by ckecking *both* I.D. bands; provide privacy

B. Have mother wash her hands with soap or detergent and water

C. Position mother

(NOTE: She may prefer to lie down the first few days because of perineal tenderness.)

1. Turn mother to one side with a pillow at her back and one under her head, or

2. Assist mother to sitting position in bed, or

3. Help mother get up and into a chair

D. Instruct mother not to touch anything after handwashing except necessary articles such as clothing and bedcovers

E. Provide packaged towel or sponge saturated with antiseptic solution so that mother may wipe her hands just prior to receiving infant

F. Wash hands before picking up infant

G. Take infant, and sponges saturated with antiseptic solution, to mother

H. Instruct mother to wipe her hands with towel, then to wipe breast with sponges, using customary circular motion

I. Position infant

J. Instruct mother to touch infant's cheek to her breast to encourage infant to seek the nipple, to stimulate rooting reflex

K. Remain with mother as indicated

1. Infant should be allowed to nurse for two or three minutes at a time the first day

2. Gradually increase nursing time, depending on condition of nipples and infant's desires

JOB SHEET #4

   3. Cracks or fissures may be caused by failing to get enough nipple and areola in the infant's mouth and by permitting infant to nurse too long at one time
   4. Most of the milk in one breast can be obtained in ten minutes of nursing
   5. Maximum time to permit infant to nurse should be twenty minutes

L. Instruct mother to avoid pulling infant from the breast when nursing is terminated; have her pull down the chin or corner of infant's mouth to release the suction on the breast

M. Encourage mother to hold infant over shoulder or in sitting position to favor eructation (burping) of air bubbles

N. Return infant to crib or nursery

O. Assist mother as needed

   1. Make sure breast is empty; use breast pump if necessary
   2. Help mother fasten or replace bra
   3. Help mother return to bed if necessary

P. Provide for patient's comfort

Q. Wash hands

R. Record

JOB SHEET #4

III. Checklist for assisting with breast-feeding

		Performed Well	Needs Improvement
A.	Identified patient and infant by checking ID bands on both; provided privacy	☐	☐
B.	Positioned mother comfortably	☐	☐
C.	Had mother wash her hands with soap or detergent and water	☐	☐
D.	Instructed mother not to touch anything after handwashing except necessary articles such as clothing and bedcovers	☐	☐
E.	Provided packaged towel or sponge saturated with antiseptic solution so that mother could wipe her hands just prior to receiving infant	☐	☐
F.	Washed hands before picking up infant	☐	☐
G.	Took infant, and sponges saturated with antiseptic solution, to mother	☐	☐
H.	Instructed mother to wipe her hands with towel, then to wipe breast with sponges; using circular motion	☐	☐
I.	Positioned infant properly	☐	☐
J.	Instructed mother to touch infant's cheek to her breast to encourage the rooting reflex	☐	☐
K.	Remained with mother as needed	☐	☐

Comments: ____

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JOB SHEET #4

		Performed Well	Needs Improvement
L.	Instructed mother to avoid pulling infant from breast when nursing was terminated; had mother use correct techniques to initiate release of nipple	☐	☐
M.	Assisted in burping infant as needed	☐	☐
N.	Returned infant to crib or nursery	☐	☐
O.	Assisted mother as needed and provided for her comfort	☐	☐
P.	Washed hands and recorded breast-feeding	☐	☐

Comments: ____

PN II - 297-C

CARE OF THE FULL-TERM AND PREMATURE NEONATE
UNIT V

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with the full-term neonate to their correct definitions. Write the correct numbers in the blanks.

_____a. Return of food from stomach to mouth

_____b. Abnormal condition caused by an increase in volume of cerebrospinal fluid within skull

_____c. Newborn infant up to four weeks of age

_____d. Membranous space between cranial bones in fetal life and infancy

_____e. Opening at point of union of lambdoid and sagittal sutures

_____f. Opening at point of union of frontal, sagittal, and coronal sutures

_____g. Within cranium or skull

_____h. Minute epidermal cysts (singular--*milium*)

_____i. Excessive amount of bilirubin in blood; severe and prolonged physiological jaundice; sometimes seen in premature infant

_____j. Bluish-gray discoloration of skin on lower back; present at birth but usually fades by school age

_____k. Abnormal smallness of head

1. Milia
2. Regurgitation
3. Neonate
4. Mongolian spot
5. Microcephaly
6. Posterior fontanel
7. Hydrocephaly
8. Hyperbilirubinemia
9. Fontanel
10. Intracranial
11. Anterior fontanel

2. List areas of assessment needed in the immediate care of the neonate.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

TEST

g. ____

h. ____

i. ____

3. Select from the following list characteristics of the appearance of the average, full-term neonate. Write an "X" in the blank before each correct answer.

______a. Average length of the neonate is 19 to 21 1/2 inches (48 to 54.5 cm)

______b. Subcutaneous tissue is thin

______c. Soles of feet are smooth

______d. Average weight is 6 to 8 1/2 pounds or 2700 to 3850 grams (2.7 or 3.85 kg)

______e. Head is large in proportion to rest of body, measuring a circumference of 13.2 to 14.8 inches (33.5 to 37.5 cm)

______f. Mainly uses mouth breathing

______g. Anterior and posterior fontanels bulge when neonate cries or strains or when intracranial pressure is increased; they may appear depressed due to dehydration

______h. Has a heavy amount of lanugo

______i. Measurement of chest is same as abdomen at birth

______j. Color of neonate ranges from pink to bright pink and becomes red when infant cries

______k. Temperature rises after birth

______l. Tissue turgor is good

______m. Sucking reflex is absent but will appear in 24 hours

______n. Lanugo will be most noticeable on shoulders and back

______o. Vernix caseosa varies from very little to complete, thick covering

______p. Veins of scalp very prominent

______q. Marks and blemishes may appear as bruises on head or scalp in cephalic presentations, on buttocks or genitalia in breech presentations; forceps marks or milia may also be present

______r. Measurement of head is twice that of chest

______s. Congenital skin blemishes or birthmarks may appear as reddened areas on the skin that may or may not be elevated and may disappear spontaneously

______t. Mongolian spots may appear but should slowly fade

TEST

4. Describe behavior of the normal, full-term neonate.

   a. Activity-- ____________________

   ____

   ____

   b. Sensory system-- ____________________

   ____

   ____

   c. Reflex behavior-- ____________________

   ____

   ____

   ____

   ____

5. Describe body systems of the full-term neonate.

   a. Respiratory-- ____________________

   ____

   ____

   b. Cardiovascular-- ____________________

   ____

   ____

   ____

   ____

   ____

   ____

   ____

   c. Temperature-- ____________________

   ____

   ____

   ____

TEST

d. Gastrointestinal-- ____________________

____

____

____

____

e. Urinary– ____________________

____

____

____

____

____

f. Endocrine– ____________________

____

____

____

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____

6. State responsibilities of the nurse in daily care of the full-term neonate.

a. ____________________
b. ____________________
c. ____________________
d. ____________________
e. ____________________
f. ____________________
g. ____________________

TEST

7. Describe methods used to instruct mother in child care.

a. Resource materials--____________________

____

____

b. Demonstrations--____________________

____

____

8. List advantages and disadvantages of breast-feeding

a. Advantages

1) ____________________
2) ____________________
3) ____________________
4) ____________________
5) ____________________
6) ____________________
7) ____________________

b. Disadvantages

1) ____________________
2) ____________________
3) ____________________

9. State nursing responsibilities when providing circumcision care.

a. ____________________

____

b. ____________________

____

c. ____________________

____

TEST

10. Match terms associated with the premature neonate to their correct definitions. Write the correct numbers in the blanks.

_____a. Pertaining to hearing

_____b. Any deviation from the usual in form, structure, or location; abnormality or malformation

_____c. Acute viral infection characterized by groups of vesicles surrounded by reddened skin area; highly contagious

_____d. Infant born before the end of the thirty-seventh week of gestation

_____e. Administration of nourishment through a nasogastric tube

_____f. Belch

_____g. Disorder of alveoli and respiratory passages that causes inadequate expansion of lungs

_____h. Pertaining to sense of touch

_____i. Condition characterized by marked decrease of response to stimuli

_____j. Type of protozoon infection which may be transmitted from mother to fetus in utero or at birth

1. Eruct
2. Stupor
3. Premature neonate
4. Toxoplasmosis
5. Anomaly
6. Gavage
7. Hyaline membrane disease
8. Herpes Type II
9. Tactile
10. Audio

11. Describe characteristics of the premature neonate.

____

____

____

12. List common maternal, fetal, and placental conditions which predispose to premature birth.

a. Maternal

1) ____

2) ____

3) ____

4) ____

TEST

5) ______________________________

6) ______________________________

7) ______________________________

8) ______________________________

9) ______________________________

10) ______________________________

11) ______________________________

12) ______________________________

b. Fetal

1) ______________________________

2) ______________________________

3) ______________________________

c. Placental

1) ______________________________

2) ______________________________

3) ______________________________

13. Select from the following list characteristics of the appearance of the premature neonate. Write an "X" in the blank before each correct answer.

_____a. Skin is reddish pink and translucent with poor turgor

_____b. Has well-developed sucking reflex

_____c. Extremities are thin with little muscle or subcutaneous tissue

_____d. Head and abdomen are large in proportion to body

_____e. Little or no lanugo is present

_____f. Soles of feet are smooth

_____g. Skin is smooth with good turgor

_____h. Nails are well developed

_____i. Superficial veins of abdomen and scalp are prominent

TEST

_____j. Lanugo is plentiful and widely distributed over back, shoulders, and extremities

_____k. Muscular and skeletal systems are immature

_____l. In male, scrotum is small with few rugae

_____m. Trunk and extremities are symetrical

_____n. In female, labia majora is widely separated by protruding labia minora and clitoris

TEST

14. Describe problems, causes, complications, and nursing responsibilities associated with prematurity.

PROBLEM	CAUSES	COMPLICATIONS	NURSING RESPONSIBILITIES
Respiratory distress	Immature development; weak gag and cough reflexes; anomalies; oversedation of mother; birth trauma; atelectasis; hyaline membrane disease; respiratory infection	a. ______________________	Maintain oxygen and humidity at prescribed levels (O_2 concentration should not exceed 40 percent, and humidity should be 60 percent or more); observe respiratory functions and be able to use monitor system; maintain careful, continued, recorded observations of the infant
Instability of body temperature	b. ______________________	Decreased circulation; shock	Maintain constant temperature and humidity to help stabilize infant's temperature; check axillary temperature and maintain between 96°F and 98°F
Inadequate nutrition	Immature digestive system; weak sucking, swallowing and gag reflexes; faulty absorption of nutrients	Aspiration; inadequate intake; abdominal distention; vomiting or regurgitation; dehydration; respiratory distress due to overfeeding	c. ______________________
d. ______________________	Constant handling, and moving of infant; lack of O_2; chilling	Exhaustion; respiratory or cardiac distress; GI distress; shock	Handle infant gently, avoid loud noises and jarring of the isolette; change position of infant periodically

TEST

15. State actions of nurse in giving emotional support to parents of premature neonate.

    a.

    b.

    c.

    d.

    e.

    f.

    g.

    h.

(NOTE: Test questions 16 and 17 list the assignment sheet and job sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

16. Assess neonate.

17. Demonstrate the ability to

    a. Hold infant.

    b. Bathe neonate.

    c. Prepare and give formula feedings.

    d. Assist with breast-feeding.

CARE OF THE FULL-TERM AND PREMATURE NEONATE
UNIT V

ANSWERS TO TEST

1. a. 2
   b. 7
   c. 3
   d. 9
   e. 6
   f. 11
   g. 10
   h. 1
   i. 8
   j. 4
   k. 5

2. a. Posture
   b. Skin
   c. Chest
   d. Genitals
   e. Abdomen
   f. Trunk and extremities
   g. Activity and neurological responses
   h. Weight and length
   i. Blood and urine values

3. a, d, e, g, i, j, l, n, o, q, s, t

4. Descriptions should include the following
   a. Activity
      1) Cries lustily and kicks or moves vigorously
      2) Sucks often, even when not eating
      3) Lies in fetal position
   b. Sensory system
      1) Heat-regulating mechanism unstable for first seven to ten days
      2) Vision limited to seeing lights and bright objects
      3) Hearing acute; infant is startled by loud noises

ANSWERS TO TEST

c. Reflex behavior

   1) Sucking, swallowing, rooting, and cough or gag reflexes are present and are essential for gaining nourishment

   2) Ability to grasp is an indication of strength and alertness

   3) Assumption of tonic neck position

5. Descriptions should include the following

   a. Respiratory

      1) Breathing is quiet and shallow, using mainly the diaphragm and abdominal muscles; rate is thirty to eighty respirations per minute

      2) Character and rhythm vary with activity

   b. Cardiovascular

      1) Heart rate is 120 to 180 beats per minute; apical pulse is more accurate than radial

      2) Blood does not circulate freely to the extremities, so feet and hands may be blue or feel cool

      3) Blood pressure is usually below 100 and is difficult to obtain

      4) Prothrombin level is low

      5) Surplus red blood cells are destroyed, resulting in hyperbilirubinemia, which temporarily tints the skin

   c. Temperature

      1) Temperature regulation is unstable; temperature drops rapidly after birth to approximately 96°F

      2) During the first twelve hours, temperature gradually rises to 98°F or 99°F and stabilizes

   d. Gastrointestinal

      1) Neonate is capable of digesting proteins, fats, and carbohydrates in mother's milk or formulas

      2) Meconium should be passed within first twenty-four hours; if no stool is passed, malformation of digestive tract is suspected

   e. Urinary

      1) First voiding may not occur for twenty-four hours, although urine is usually in bladder at birth

ANSWERS TO TEST

2) Infant has ample fluid in the tissues and usually does well without fluids the first few hours

3) Kidneys are limited in their ability to respond to an abnormal fluid balance; therefore, edema or dehydration may occur rapidly

f. Endocrine

1) Maternal hormones cross the placental barrier and may cause swelling of the breasts in either sex, breast secretion in either sex, pseudo menstruation in female, and white mucoid vaginal discharge in female

2) Genitalia of both male and female may be swollen; breech infants may have discoloration as well

3) Foreskin may adhere to glans penis

6. a. Protect neonate by maintaining aseptic technique and by using separate equipment for each infant

b. Document observations of neonate's activities

c. Provide physical care of newborn as indicated or needed

d. Handle infants gently but firmly; always provide support for head and neck

e. Avoid sudden movements and loud noises

f. Provide a sense of security and safety in carrying infant

g. Touch and talk to infant when you give care

7. Descriptions should include the following

a. Resource materials

1) Obtain pamphlets on feeding, bathing, and diapering techniques; listen for any questions

2) Use audio-visual equipment to help teach mother some of the basic skills; answer any questions

b. Demonstrations

1) Bring baby to mother; demonstrate skills and answer questions; then allow mother to perform skills the next time

2) Bring a group of mothers and fathers together to demonstrate skills, using an infant from the nursery

ANSWERS TO TEST

8. a. Advantages

    1) Requires little preparation; is convenient
    2) Stimulates secretion of oxytocic hormone in mother
    3) Provides pleasure for mother and infant
    4) Breast milk is more easily digested by infant than is cow's milk or formula
    5) Breast milk may increase infant's resistance to respiratory and gastrointestinal infection
    6) Breast milk is free from harmful bacteria
    7) Breast milk causes fewer allergic reactions in infant than does cow's milk or formula

    b. Disadvantages

    1) May be too confining for mother
    2) Transmits certain drugs through the milk
    3) Contraindicated in some communicable diseases such as syphilis, tuberculosis, or other highly contagious diseases

9. a. Observe neonate frequently for bleeding, swelling of the incision or penis, and urinary retention

    b. Keep area clean; change dressings as necessary

    c. Place infant on side rather than on abdomen

10. a. 10
    b. 5
    c. 8
    d. 3
    e. 6
    f. 1
    g. 7
    h. 9
    i. 2
    j. 4

11. Description should include the following

    a. Birth weight less than 2500 grams or 5 1/2 pounds

    b. Gestation of less than thirty-seven weeks

    c. Lack of physical development

ANSWERS TO TEST

12. a. Maternal
    1) Severe malnutrition
    2) Severe anemia
    3) Alcoholism or other drug use
    4) Excessive smoking
    5) Maternal age
    6) Preeclampsia
    7) Multiple pregnancies or multiple births
    8) Lack of prenatal care
    9) Closely spaced pregnancies
    10) Previous aborted pregnancies
    11) Physical or emotional stress
    12) Diabetes or other endocrine disturbances

    b. Fetal
    1) Anomalies in development
    2) Anemia
    3) Maternal infections transmitted to fetus

    c. Placental
    1) Anomalies in development
    2) Chronic placental deficiencies
    3) Placenta previa or abruptio placentae

13. a, c, d, f, i, j, k, l, n

14. a. Pneumonias, serious upper respiratory infections

    b. Immature temperature-regulating center; lower heat production due to inactivity; small amounts of subcutaneous fat in relation to body surface

    c. Provide adequate nutrition and fluids via IV, gavage, or bottle feedings; feed very small amounts at one time; monitor and measure I and O accurately; observe character and frequency of stools; weigh infant at same time each day

    d. Fatigue

ANSWERS TO TEST

15. a. Allow husband and wife to remain together as much as possible

    b. Provide information concerning the infant and care needed

    c. Recognize that parents' fears and anxieties are natural, normal, and acceptable behavior

    d. Permit parents to observe infant as often and as much as is practical

    e. Provide opportunity for parents to ask questions and receive instructions concerning infant care

    f. Permit physical contact with infant when appropriate

    g. Allow parents to participate in infant care during mother's hospitalization and after her discharge

    h. Provide individualized care instructions for parents before infant is to be discharged

16. Evaluated to the satisfaction of the instructor

17. Performance skills evaluated to satisfaction of instructor

IMMEDIATE CARE OF THE NEWBORN WITH ANOMALIES
UNIT VI

UNIT OBJECTIVE

After completing this unit, the student should be able to plan and give nursing care to newborn infants with anomalies. This knowledge will be shown by completing assignment sheet, job sheet, and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with the care of the newborn with anomalies to their correct definitions.
2. List major types of anomalies.
3. Describe characteristics, complications, prognosis, and nursing responsibilities for infant with Down's syndrome.
4. Describe causes, characteristics, complications, treatment, and nursing responsibilities for central-nervous-system anomalies.
5. Discuss the incidence, symptoms, and treatment of congenital heart defects.
6. Select from a list characteristics of the classes of heart defects.
7. Distinguish between acyanotic and cyanotic defects.
8. State nursing responsibilities when caring for infant with cleft lip and/or palate.
9. Describe treatment for anomalies of the musculoskeletal system.
10. Select from a list symptoms and treatment of ABO incompatibility disease.
11. Discuss use of phototherapy in treatment of jaundice in the newborn.
12. Select from a list indications of an Rh incompatibility or erythroblastosis fetalis.
13. Distinguish between complications of an Rh incompatibility.
14. State nursing responsibilities in the treatment of an infant with Rh incompatibility.
15. Describe diagnosis and treatment of phenylketonuria (PKU).
16. Describe causes and treatment of cretinism.

OBJECTIVE SHEET

17. Select from a list characteristics of the newborn of a diabetic mother.

18. State nursing responsibilities in the treatment of the newborn of a diabetic mother.

19. List characteristics of newborn with an intracranial hemorrhage.

20. Describe treatment and nursing responsibilities for newborn with an intracranial hemorrhage.

21. Describe common nerve injuries of newborn.

22. Discuss types of infections found in the newborn, their causes, symptoms, treatments, and nursing responsibilities.

23. State nursing actions that provide emotional support for parents of a newborn with an anomaly.

24. Prepare case study of newborn with an anomaly.

25. Demonstrate the ability to administer phototherapy.

IMMEDIATE CARE OF THE NEWBORN WITH ANOMALIES
UNIT VI

SUGGESTED ACTIVITIES

I. Suggested activities

- A. Order materials planned to supplement unit: Filmstrip–*Cardiopulmonary Resuscitation Techniques for Infants and Children.* Available from Trainex Corporation, P. O. Box 116, Garden Grove, California 92642.
- B. Make transparencies.
- C. Provide students with objective sheet.
- D. Provide students with information, assignment, and job sheets.
- E. Discuss unit and specific objectives.
- F. Discuss information and assignment sheets.
- G. Demonstrate and discuss procedures outlined in job sheet.
- H. Develop appropriate learning activities for special-needs students.
- I. Provide care plans to be used in developing Assignment Sheet #1.
- J. Invite pediatric nurse or clinician to speak to class on nursing care of newborn with anomalies.
- K. Take a field trip to observe a neonatal unit for the care of newborns with anomalies.
- L. Provide current articles from periodicals concerning care of neonates with anomalies.
- M. Give test.
- N. Reteach if necessary.

II. Instructional materials

- A. Objective sheet
- B. Suggested activities
- C. Information sheet
- D. Transparency masters
  1. TM #1--The Normal Heart
  2. TM #2--Coarctation of the Aorta and Patent Ductus Arteriosus
  3. TM #3--Atrial and Ventricular Septal Defects

SUGGESTED ACTIVITIES

   4. TM #4--Tetralogy of Fallot and Transposition of the Great Vessels
   5. TM #5--Talipes

E. Assignment Sheet #1--Prepare Case Study of Newborn with an Anomaly

F. Answers to assignment sheet

G. Job Sheet #1--Administer Phototherapy

H. Test

I. Answers to test

III. Unit references

A. Anderson, Barbara, and Pamela Shapiro. *Obstetrics for the Nurse.* Albany, New York: Delmar Publishers, 1972.

B. Jensen, Margaret Duncan, Ralph C. Benson, and Irene M. Bobak. *Maternity Care: The Nurse and the Family.* St. Louis: The C.V. Mosby Company, 1977.

IMMEDIATE CARE OF THE NEWBORN WITH ANOMALIES
UNIT VI

INFORMATION SHEET

I. Terms and definitions

A. Anencephaly--Malformation of brain and cranium with cerebral hemispheres missing or reduced to small masses

B. Congenital heart defect--Any failure of heart or great vessels near heart to mature or develop normally in prenatal or immediate neonatal period

C. Coombs' test--Laboratory test that reveals certain antigen-antibody reactions; used in diagnosing various types of hemolytic diseases

D. Cretinism--Arrested physical and mental development due to lack of thyroid hormone

E. Down's syndrome--Chromosomal anomaly in which affected person has forty-seven chromosomes

F. Hemolytic--Pertaining to destruction of red blood cells

G. Hydrocephaly--Abnormal condition caused by an increase in volume of cerebrospinal fluid within skull

H. Kernicterus--Bilirubin encephalopathy involving the deposit of bilirubin in brain cells; result can mean impaired intellect, impaired perceptive or motor function, and possibly death

I. Meningocele--Spina bifida with protrusion of cerebral or spinal meninges

J. Meningomyelocele--Spina bifida with protrusion of a portion of spinal cord and membranes

K. Myelomeningocele--Spina bifida with protrusion of meninges and part of spinal cord or cauda equina

L. Opisthotonos--Arched position of body with head and lower limbs bent backward due to tetanic spasms of back muscles

M. Paraplegia--Paralysis of lower limbs

N. Phenylalanine--One of the amino acids produced in metabolism of proteins

O. Phenylketonuria (PKU)--Condition in which liver enzyme necessary to change the essential amino acid phenylalanine to tyrosine is absent; if not treated, may result in mental retardation

P. Phototherapy--Treatment by exposure to light

Q. Shunt--Alternate pathway or bypass

INFORMATION SHEET

R. Spina bifida--Congenital defect in closure of skull or vertebral canal with or without herniaton

S. Spina bifida occulta--Imperfect closure of spinal canal

II. Major types of anomalies (Assignment Sheet #1)

A. Congenital

EXAMPLES: Chromosomal aberrations, central-nervous-system abnormalities, congenital heart defects, gastrointestinal malformations, musculoskeletal defects, hemolytic diseases, metabolism errors

B. Birth injuries

EXAMPLES: Intracranial hemorrhage, nerve injuries, fractures and dislocations

C. Infections

EXAMPLES: Ophthalmia neonatorum, thrush, congenital syphilis, epidemic diarrhea, congenital rubella, impetigo, herpes 2

III. Characteristics, complications, prognosis, and nursing responsibilities for infant with Down's syndrome

(NOTE: Down's syndrome or mongolism is the most common of the chromosomal aberrations. Klinefelter's and Turner's syndromes are ones in which the individual has an extra sex chromosome.)

A. Characteristics

(NOTE: This condition is nearly always recognizable at birth.)

1. Slanted eyes
2. Flat nose
3. Thick tongue which protrudes from the mouth
4. Short hands with deep horizontal creases in palm and incurving fifth finger
5. Decreased muscle tone
6. Wide space between the first and second toes
7. Short, broad neck and head

INFORMATION SHEET

B. Complications

1. Heart or eye defects
2. Retarded mental and physical development
3. Poor resistance to infection

C. Prognosis--Depending upon severity of other deformities and mental retardation, child may develop some self-help skills and have some degree of independent behavior

D. Nursing responsibilities

1. Feed with care

   (NOTE: Due to lack of muscle tone, the infant may have difficulty sucking and swallowing.)

2. Provide audio and visual stimulation and extra personal attention to assist infant to develop to fullest potential

INFORMATION SHEET

IV. Causes, characteristics, complications, treatment, and nursing responsibilities for central-nervous-system anomalies

	HYDROCEPHALY	ANENCEPHALY	SPINA BIFIDA
Causes	Obstruction in free circulation of cerebrospinal fluid; defective absorption of cerebrospinal fluid (NOTE: The prognosis of this condition is always guarded.)	Unknown	Imperfect closure of or protrusion in back along spinal column; most common in lumbosacral area (NOTE: The types of spina bifida are spina bifida occulta, meningocele, meningomyelocele, and myelomeningocele.)
Characteristics	Increase in head size to 14.9" or 37.8 cm (or more) in circumference, decrease in motor function, bulging fontanels, separation of suture lines, shiny scalp with distended veins, strabismus, "setting sun" eyes (NOTE: The eyes appear to be pushed downward with the sclera visable above the iris.)	Scalp and cranium may be missing; top part of head is very small or appears to be absent	Obvious protrusion of part of spinal column, ranging in size from very small to very large; may leak spinal fluid
Complications	Size and weight of head increases; neck muscles become weak, unable to turn head; increasing intracranial pressure causes brain damage with symptoms such as irritability, vomiting, or convulsions; mental retardation (NOTE: Death may occur due to complications.)	No chance for infant to survive	Will vary depending on size and location, hydrocephaly, urinary or fecal incontinence, loss of motor control or sensation below site, club feet, congenital hip dislocation, infection (NOTE: Child will usually be a paraplegic; incidence of infection is high and much surgery and rehabilitation will be needed if child survives.)
Treatment and nursing reponsibilities	Surgical implantation of shunt to drain excess fluid into right atrium; shunts may have to be replaced several times; complications after surgery may include septicemia or pulmonary thrombosis; change infant's position frequently to prevent pressure areas or skin breakdown on bony prominences, head, and ears; support head and neck when lifting; feed carefully and slowly; measure head daily; provide stimulus to infant by talking and singing; provide lightweight, colorful toys	Gently hold infant whenever possible or touch through isolette portholes	Surgical removal or repair of defect, rehabilitation, position to prevent pressure on site, change position frequently, cleanse perineum and treat to minimize irritation due to incontinence, protect site to prevent infection when leaking occurs, provide emotional stimulation

INFORMATION SHEET

V. Incidence, symptoms, and treatment of congenital heart defects

(NOTE: The prognosis for the child is usually favorable, but depends upon the condition, size, and age of the child.)

A. Incidence

1. Cause more infant deaths than any other anomaly
2. May be slight enough to be asymptomatic and never detected
3. May be surgically corrected in the majority of infants who survive

B. Symptoms

1. Cyanosis
2. Dyspnea
3. Tachycardia

   (NOTE: Tachycardia is a cardinal symptom.)

4. Feeding difficulties or choking spells
5. Failure to gain weight or strength
6. Fatigue upon any activity

C. Treatment

1. Medical to improve infant's condition
2. Surgical repair done in stages, palliative as needed; corrective repair is usually delayed until preschool or school age

VI. Classification of heart defects

A. Acyanotic

1. Indicates very little or no cyanosis, with oxygen saturation of more than 85 percent in the peripheral circulation
2. Occurs in any heart defect where there is little or no mixing of oxygenated with unoxygenated blood

B. Cyanotic

(NOTE: Degree of cyanosis is affected by the number of abnormalities and by other complications.)

1. Indicates presence of noticeable cyanosis with oxygen saturation of less than 85 percent in the peripheral arterial circulation

INFORMATION SHEET

2. Occurs in any heart defect which allows unoxygenated blood from the right side of the heart to mix with oxygenated blood from the left side of the heart

3. Can occur at atrial, ventricular, or aortic level and with a combination of defects

VII. Acyanotic and cyanotic defects (Transparencies #1-#4)

A. Acyanotic

1. Coarctation of the aorta (Transparency #2)

(NOTE: Stenosis of the aorta causes a diminished flow of blood through the aorta.)

2. Patent ductus arteriosus (Transparency #2)

(NOTE: The fetal ductus arteriosus fails to close and permits blood to flow from the aorta into the pulmonary artery.)

3. Atrial septal defect (Transparency #3)

(NOTE: The foramen ovale fails to close and permits flow of blood from the left atrium into the right atrium.)

4. Ventricular septal defect (Transparency #3)

(NOTE: An abnormal opening in the ventricular wall allows blood to flow from the left ventricle into the right ventricle.)

B. Cyanotic

1. Tetralogy of Fallot (Transparency #4)

(NOTE: This is the most common type of cyanotic defect and is a combination of four defects: [a] pulmonary stenosis, a narrowing of the pulmonary artery with decreased flow of blood to the lungs; [b] ventricular septal defect, an opening between the ventricles which allows the mixing of oxygenated and unoxygenated blood; [c] overriding aorta, displacement of the aorta to the right, allowing blood to enter it from both ventricles; and [d] hypertrophy of the right ventricle, enlargement of the right ventricle by the increased effort needed to pump the blood through the narrowed pulmonary artery.)

2. Transposition of the great vessels (Transparency #4)

(NOTE: The aorta arises from the right ventricle and the pulmonary artery from the left ventricle.)

INFORMATION SHEET

VIII. Nursing responsibilities when caring for infant with cleft lip and/or palate

(NOTE: This condition is caused when the maxillary and premaxillary processes fail to fuse during the fifth to eighth week of intrauterine life. Surgical repair of the lip is done soon after birth, and repair of palate is usually done after the age of ten months.)

A. Allow more time than usual for feedings

(NOTE: Special feeding techniques are necessary due to difficulties in sucking and/or swallowing.)

B. Feed slowly with a soft-tipped syringe, rubber-tipped medicine dropper, Brecht feeder, or spoon

C. Hold infant in an upright position to facilitate swallowing

D. Assist infant to eruct frequently because the infant with a mouth deformity swallows more air than the average infant

E. Use restraints as prescribed to prevent infant from scratching the site

IX. Treatment for anomalies of the musculoskeletal system (Transparency #5)

A. Talipes

(NOTE: This condition may include any one of a variety of deformities of the foot. Most common foot deformity is talipes equinovarus or *clubfoot* [Transparency #5]. Usually one or both feet are twisted out of shape or out of usual position.)

1. Manipulation and exercise of extremities as prescribed by physician
2. Corrective shoes or other devices prescribed and fitted by physician or trained persons
3. Plaster cast applied to affected foot
4. Surgical correction of deformity

B. Congenital hip dislocation

(NOTE: This condition is characterized by partial or complete displacement of the head of the femur from a malformed hip socket. Usually condition occurs more often in girls; infant has limited abduction of the hip joint and asymmetry of the gluteal folds.)

1. Manipulation of femur into place followed by application of a splint or cast
2. Surgical correction if manipulation is delayed or unsuccessful

INFORMATION SHEET

X. ABO incompatibility disease

(NOTE: The prognosis is very good, and recovery is usually spontaneous.)

A. Symptoms

1. Jaundice within first forty-eight hours after birth
2. Mild anemia
3. Negative or low Coombs' test

B. Treatment and nursing responsibilities

1. Exchange transfusion if bilirubin is high
2. Phototherapy

XI. Use of phototherapy in treatment of jaundice in the newborn (Job Sheet #1)

A. Light therapy reduces bilirubin levels in blood and prevents brain damage due to kernicterus

B. Process is not completely understood, but it is known that photo-oxidation of bilirubin occurs in skin and not in plasma; light thus converts bilirubin to a colorless, polar, water-soluble compound which can readily be excreted in urine

XII. Indications of an Rh incompatibility or erythroblastosis fetalis

(NOTE: Diagnosis is confirmed by Coombs' test, serum bilirubin, Rh determination using cord blood. Treatment will necessitate complete exchange transfusion in some cases.)

A. Yellow vernix caseosa

B. Anemia present at birth or soon after

C. Jaundice within twenty-four hours after birth

D. Enlarged liver and spleen

E. Positive Coombs' test

F. Elevated bilirubinemia

G. Lethargy

H. Generalized weakness

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INFORMATION SHEET

XIII. Complications of Rh incompatibility

A. Kernicterus

1. Degeneration of central nervous tissue due to persistent high bilirubinemia

2. Symptoms include extreme lethargy, opisthotonos, convulsions, and a shrill, high-pitched cry

B. Hydrops fetalis

1. Most severe form of erythroblastosis fetalis

2. Symptoms include excessive edema, marked anemia, jaundice, and enlargement of the liver and spleen

3. Affected infants are stillborn or live only a short time

XIV. Nursing responsibilities in the treatment of an infant with Rh incompatibility

A. Observe all neonates for jaundice; report to the physician immediately when jaundice occurs

B. Change position frequently to avoid atelectasis

C. Prevent secondary infection

D. Omit feedings as prescribed before transfusions

E. Observe carefully for signs of shock following transfusions

F. Observe fluid intake, oral and/or parenteral

XV. Diagnosis and treatment of phenylketonuria (PKU)

(NOTE: Untreated phenylalanine build-up in the blood serum as much as twenty times the normal level causes severe mental retardation. Phenylalanine and its metabolites are excreted in the urine.)

A. Diagnosis

1. Guthrie blood test is used after infant has received feedings for at least twenty-four hours, usually the third or fourth day after birth

2. Test is repeated in four or five weeks if positive

3. Oklahoma state law requires performance of test on all neonates

INFORMATION SHEET

B. Treatment

(NOTE: Best results are obtained when treatment is begun early. After a few years of treatment, normal diet may be tolerated.)

1. Early recognition of the disease increases chances of recovery
2. Administration of low phenylalanine formula/diet as soon as condition is diagnosed

XVI. Causes and treatment of cretinism

(NOTE: Infant may appear normal at birth; clinical signs and symptoms are not fully developed before three to six months of age.)

EXAMPLES: Large, protruding tongue, dry skin, coarse hair, protruding abdomen, obstinate constipation, poor muscle tone, depressed reflexes, hoarse cry, puffy eyes, umbilical hernia

A. Causes

1. Absence of thyroid gland
2. Defective production of thyroxin
3. Maternal ingestion of medication which suppresses thyroid function

B. Treatment

1. Administration of a thyroid preparation is necessary throughout life
2. Early treatment and adequate dosage permit fairly normal physical growth and mental development

XVII. Characteristics of the newborn of a diabetic mother

A. Premature birth

B. Obese appearance due to generalized edema

C. Greater urinary output and weight loss than that of a normal newborn

D. Poor muscle tone

E. Listlessness

F. Respiratory distress due to hyaline membrane disease and atelectasis

XVIII. Nursing responsibilities in the treatment of the newborn of a diabetic mother

A. Monitor blood glucose determinations at birth and every two to four hours until glucose level is stable

B. Suction respiratory tract as needed because respiratory secretions are also increased

INFORMATION SHEET

C. Place infant in incubator and treat as premature, regardless of size

D. Administer glucose intravenously if blood sugar is abnormally low

XIX. Characteristics of newborn with an intracranial hemorrhage

(NOTE: This condition may be caused from birth trauma, a precipitate delivery, or hard, prolonged labor.)

A. Weak, shrill, or high-pitched cry

B. Poor reflexes

C. Thrashing movements of extremities

D. Periods of apnea and cyanosis

E. Difficult respirations

F. Poor sucking reflex

G. Vomiting

H. Bulging or tense fontanels

I. Convulsions

XX. Treatment and nursing responsibilities for newborn with intracranial hemorrhage

A. Treatment

(NOTE: Prognosis for this condition depends upon the severity and location of the hemorrhage. Recovery may result in mental retardation, cerebral palsy, or epilepsy.)

1. Cranial pressure may be relieved by spinal or dural taps
2. Elevation of head of bed helps reduce cerebral venous pressure
3. Anticonvulsive medication may be ordered
4. Vitamin K may be given to minimize bleeding

B. Nursing responsibilities

1. Handle gently and as little as possible
2. Avoid loud noises or jarring infant
3. Keep infant in incubator or isolette to provide a regulated atmosphere
4. Withhold feedings until condition is stabilized
5. Maintain close observation of vital signs and general behavior

INFORMATION SHEET

XXI. Common nerve injuries of newborn

A. Facial paralysis

(NOTE: Facial paralysis is one of the most common nerve injuries.)

1. Characteristics
    - a. No movement in muscles on affected side
    - b. Mouth pulls toward unaffected side
2. Treatment--Recovery is spontaneous, usually without residual damage

B. Paralysis of upper arm or Erb's palsy

(NOTE: This condition occurs during a difficult delivery when pressure is exerted on the arm.)

1. Characteristics
    - a. Arm does not move
    - b. Muscles in affected arm are flaccid
2. Treatment
    - a. Positioning and support of affected arm
    - b. Physical therapy
    - c. Surgery if nerve is severely damaged

INFORMATION SHEET

XXII. Types of infections found in the newborn, their causes, symptoms, treatments, and nursing responsibilities

INFECTION	CAUSE	SYMPTOMS	TREATMENT	NURSING RESPONSIBILITIES
Thrush	Fungus infection, Candida albicans; may be contracted during birth from infected birth canal or may be transmitted by personnel who use poor aseptic technique	White patches that cannot be easily removed from mucous membranes of mouth	Antibiotics; gentian violet solution to affected areas	Isolate infant; observe intake (if there is much involvement, infant may not want to suckle); give water after feeding to aid in cleansing mouth
Congenital syphilis	Transfer of spirochete Treponema pallidum through placenta of an infected mother	Highly infectious skin lesions on face, palms, buttocks, or soles of feet; nasal discharge associated with sniffing sounds on inspiration; bleeding ulcerations on mucous membranes; enlargement of liver, spleen, and lymph nodes; tender joints; positive serology	Antibiotics (NOTE: Pathological changes in bones, eyes, and nervous system may be seen if treatment does not take place.)	Isolate infant; administer antibiotics as prescribed

INFORMATION SHEET

INFECTION	CAUSE	SYMPTOMS	TREATMENT	NURSING RESPONSIBILITIES
Epidemic diarrhea	Organisms of staphylococci or E. coli; overcrowding in nursery; poor personal hygiene of personnel or mothers; poor aseptic technique	Sudden onset of watery, yellowish-green stools	Antibiotics; prevent dehydration through IVs	Isolate any suspected case; maintain aseptic technique; record I and O; keep buttocks clean and dry
Rubella	Maternal infection during first trimester of pregnancy may result in one or more deformities of infant	Cultures of rubella virus may be obtained from pharyngeal secretions, urine, cerebrospinal fluid, and other secretions or tissues	Infection can be spread to others; ears, heart, and eyes are most frequently affected	Treatment and prognosis will depend on type and severity of the deformity
Impetigo	Staphylococci, or streptococci organisms; break in aseptic technique; contact with infected person	Blebs which are most likely to develop in folds, creases, and moist surfaces	Administer antibiotics and ointments as prescribed	Isolate infant, maintain aseptic technique, remove crusts with soap and water, apply ointment, give antibiotics, prevent dehydration
Herpes 2	Herpesvirus hominis Type 2 (NOTE: Neonatal infection is rare, but when contracted, it can be fatal.)	Fever, coryza, tachycardia, hemorrhage, lesions that appear as vesicles	Delivery of infant by C-section; strict isolation technique; *no* curative treatment is available at present	Observe for symptoms, keep infant isolated, use gloves when caring for infant, treat symptoms to keep infant comfortable

INFORMATION SHEET

XXIII. Nursing actions that provide emotional support for parents of a newborn with an anomaly (Assignment Sheet #1)

A. Allow time for parents to ask questions and express fears and feelings

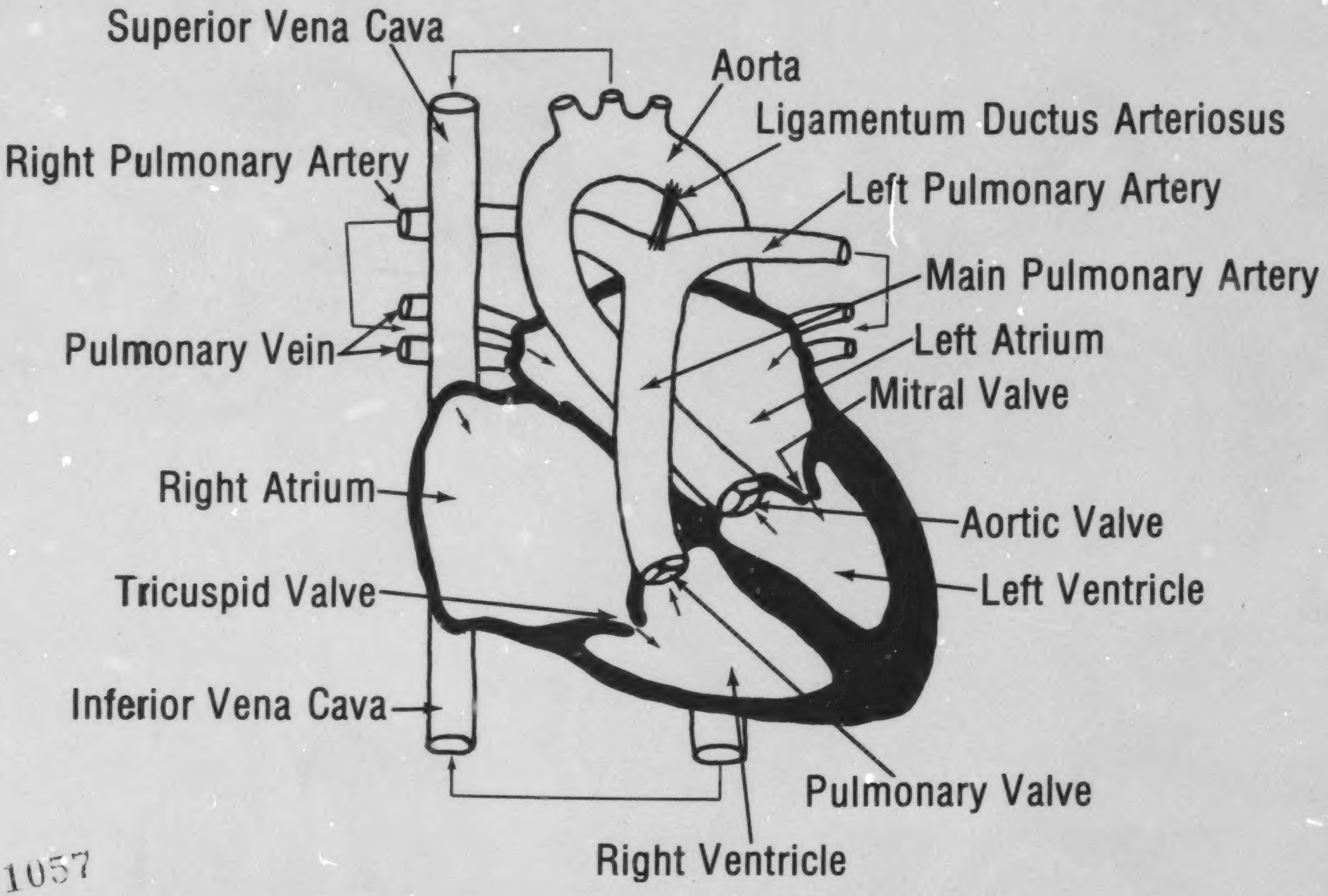
B. Permit parents to assist with infant care as much as possible

C. Instruct in any special aspects of infant care

D. Report any specific concerns to the proper person

E. Be aware of community agencies and national organizations that offer assistance for children or parents of children with unusual problems, and inform parents of such organizations

The Normal Heart



Superior Vena Cava
Aorta
Ligamentum Ductus Arteriosus
Right Pulmonary Artery
Left Pulmonary Artery
Main Pulmonary Artery
Pulmonary Vein
Left Atrium
Mitral Valve
Right Atrium
Aortic Valve
Tricuspid Valve
Left Ventricle
Inferior Vena Cava
Pulmonary Valve
Right Ventricle

TM #1

1057

PN II - 333-C

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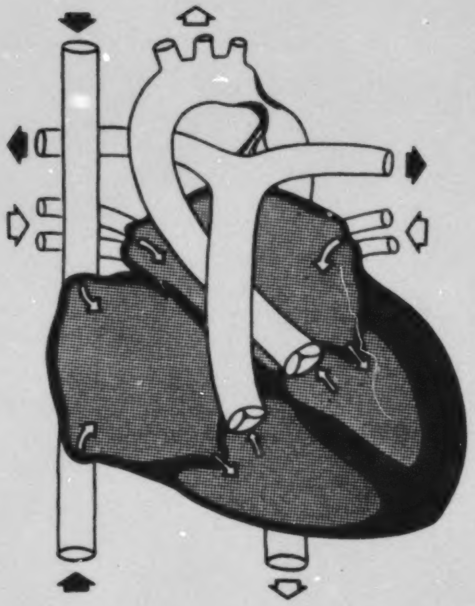
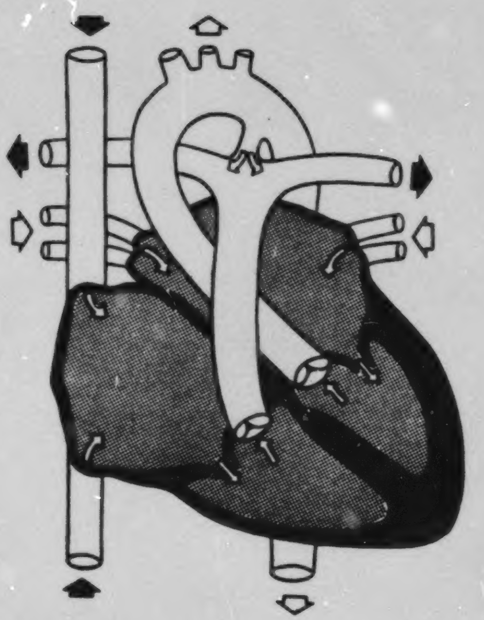
Coarctation of the Aorta and Patent Ductus Arteriosus





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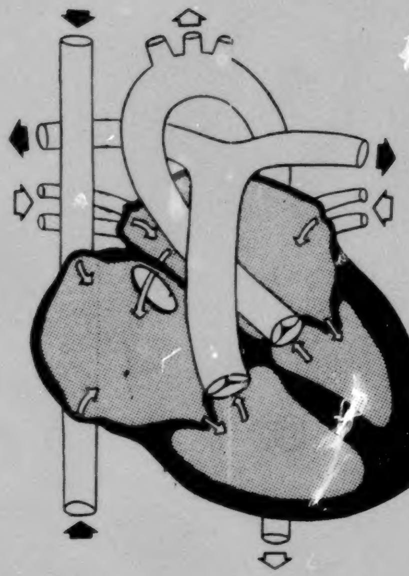
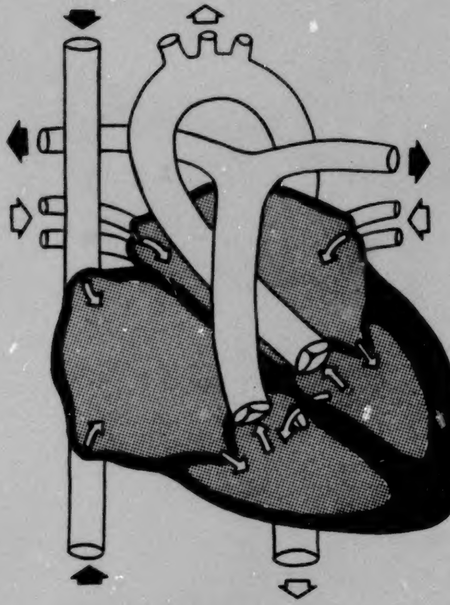
TM #2

PN II - 335-C

Atrial and Ventricular Septal Defects

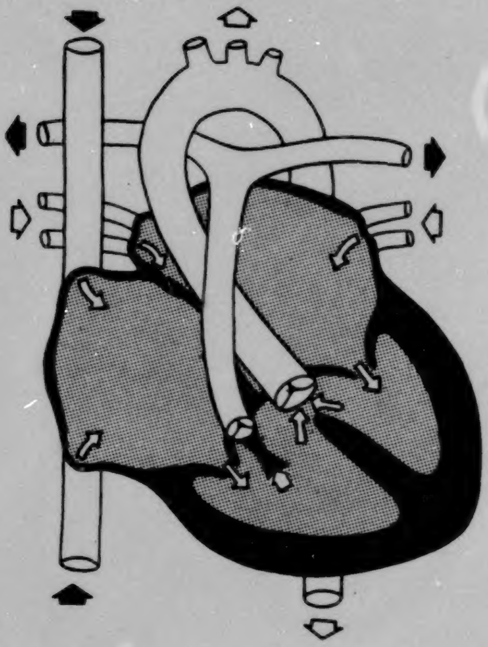




TM #3

PN II - 337-C

Tetralogy of Fallot and Transposition of the Great Vessels



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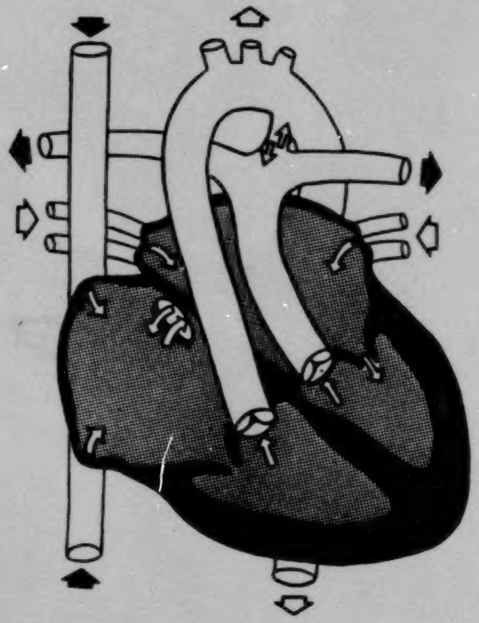

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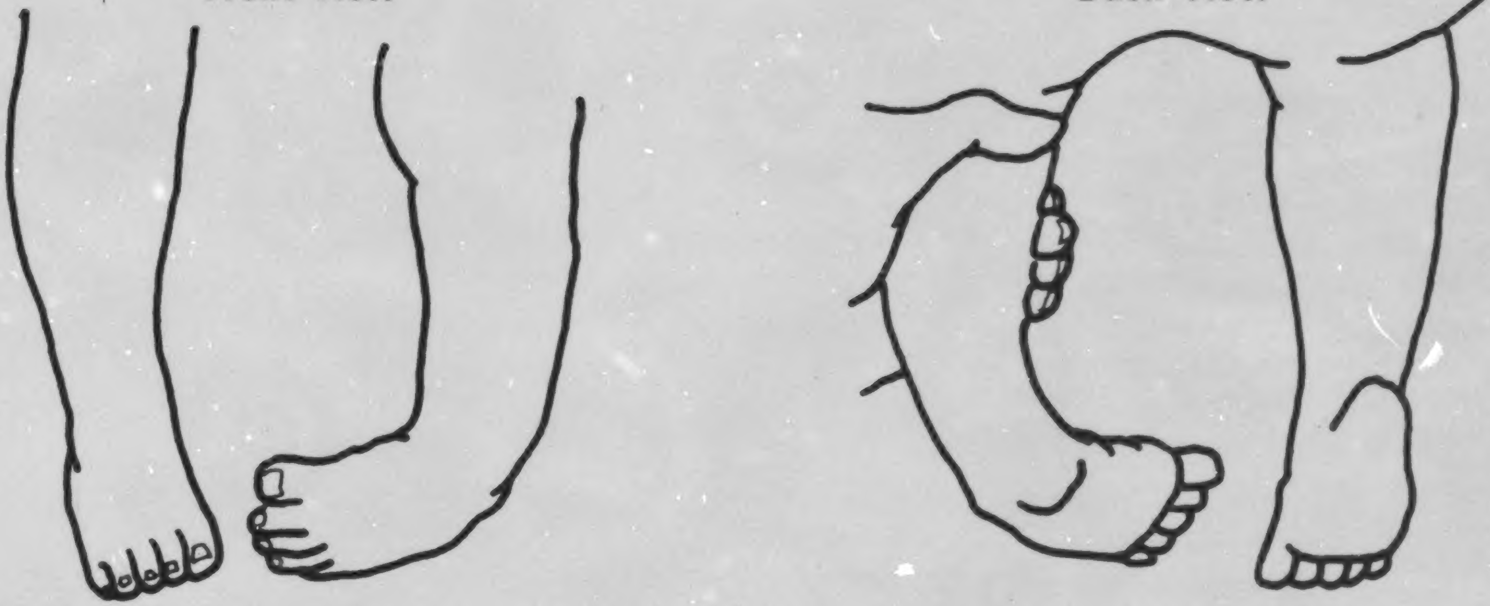
TM #4

PN II - 339-C

Talipes



Front View

Back View

UNILATERAL CLUBFOOT

TM #5

PN II - 341-C

IMMEDIATE CARE OF THE NEWBORN WITH ANOMALIES
UNIT VI

ASSIGNMENT SHEET #1--PREPARE CASE STUDY OF NEWBORN WITH AN ANOMALY

NAME ______________________ SCORE ____________

Select a newborn with an anomaly or one assigned to you by your instructor. Prepare a case study to be used in planning nursing care. Your instructor will provide the care-plan form to be used. As you plan your case study, ask yourself the following questions. This case study should be handed in to instructor for evaluation.

A. Name of the anomaly? ____________________

B. Cause of the anomaly? ____________________

C. Is this anomaly considered to be genetic? __________ caused from birth trauma? __________ or an infectious condition? __________

D. What are the characteristics of the anomaly? ____________________

E. What nursing responsibilities will be needed to care for this infant? ____________________

F. What type of complications are common with this anomaly? ____________________

G. What is the prognosis for your patient's condition? ____________________

ASSIGNMENT SHEET #1

H. How are the parents reacting to the condition of their infant? ________________________

____

I. How can you assist the parents? ____________________________________

____

IMMEDIATE CARE OF THE NEWBORN WITH ANOMALIES
UNIT VI

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

IMMEDIATE CARE OF THE NEWBORN WITH ANOMALIES
UNIT VI

JOB SHEET #1–ADMINISTER PHOTOTHERAPY

I. Equipment

A. Light source with eight fluorescent bulbs or 20-watt daylight light bulb

B. Eye pads or specially designed eye cover

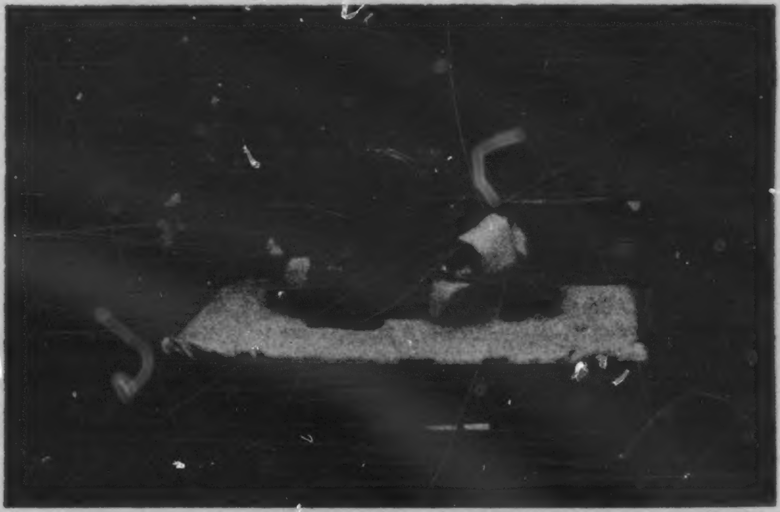
II. Procedure

A. Wash hands

B. Prepare light source (Figure 1)

(NOTE: If a commercial light with a safety shield is not being used, the nurse must be sure that there is an adequate protector of some type between the bulb and infant.)

FIGURE 1



C. Place light over infant's crib or isolette at a distance of 15 to 24 inches from baby

D. Cover baby's eyes with eye pads or protector

(CAUTION: Make sure baby's eyes are closed when covering with patches, otherwise corneal abrasions could occur. Continue to check eye coverings throughout treatment.)

E. Undress baby completely, or leave on diaper

JOB SHEET #1

F. Turn on light source

G. Monitor baby's temperature throughout exposure

(NOTE: If temperature increases, remove infant from light temporarily. If temperature remains elevated, notify physician.)

H. Make sure infant has adequate fluids to replace loss through loose stools and loss from tissues

I. Remove light source when time element is complete

(NOTE: Length of time for exposure will be prescribed by the physician.)

J. Observe infant and document reaction

(NOTE: Possible capillary dilatation may cause skin to look sunburned. This usually is transient and not considered serious.)

K. Remove light source and eye pads from infant and make infant comfortable

(NOTE: Replace gown and blanket; make infant warm and comfortable.)

JOB SHEET #1

III. Checklist for administering phototherapy

		Performed Well	Needs Improvement
A.	Washed hands correctly	☐	☐
B.	Prepared light source correctly and safely	☐	☐
C.	Placed light over infant's crib or isolette at a distance of 15 to 24 inches from baby	☐	☐
D.	Covered baby's eyes with eye pads or protector	☐	☐
E.	Undressed baby completely, or left on the diaper	☐	☐
F.	Turned on light source	☐	☐
G.	Monitored baby's temperature throughout the exposure	☐	☐
H.	Made sure infant had adequate fluids to replace loss through loose stools and loss from tissues	☐	☐
I.	Removed light source when time element was completed	☐	☐
J.	Observed infant and documented reaction	☐	☐
K.	Removed light source and eye pads from infant and made comfortable	☐	☐

Comments: ____

____

____

____

____

IMMEDIATE CARE OF THE NEWBORN WITH ANOMALIES
UNIT VI

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with the care of the newborn with anomalies to their correct definitions. Write the correct numbers in the blanks. Terms and definitions are continued on the next page.

______a. Imperfect closure of spinal canal

______b. Any failure of heart or great vessels near heart to mature or develop normally in prenatal or immediate neonatal period

______c. Alternate pathway or bypass

______d. Malformation of brain and cranium with cerebral hemispheres missing or reduced to small masses

______e. Congenital defect in closure of skull or vertebral canal with or without herniation

______f. Spina bifida with protrusion of cerebral or spinal meninges

______g. Spina bifida with protrusion of a portion of spinal cord and membranes

______h. Spina bifida with protrusion of meninges and part of spinal cord or cauda equina

______i. Chromosomal anomaly in which affected person has forty-seven chromosomes

______j. Paralysis of lower limbs

______k. Abnormal condition caused by an increase in volume of cerebrospinal fluid within skull

______l. Arrested physical and mental development due to lack of thyroid hormone

______m. Laboratory test that reveals certain antigen-antibody reactions; used in diagnosing various types of hemolytic diseases

______n. Bilirubin encephalopathy involving the deposit of bilirubin in brain cells; result can mean impaired intellect, impaired perceptive or motor function, and possibly death

1. Myelomeningocele
2. Congenital heart defect
3. Down's syndrome
4. Spina bifida
5. Meningocele
6. Shunt
7. Paraplegia
8. Anencephaly
9. Spina bifida occulta
10. Meningomyelocele
11. Hydrocephaly
12. Coombs' test
13. Kernicterus
14. Cretinism

TEST

_____o. Arched position of body with head and lower limbs bent backward due to tetanic spasms of back muscles

_____p. One of the amino acids produced in metabolism of proteins

_____q. Condition in which liver enzyme necessary to change the essential amino acid phenylalanine to tryosine is absent; if not treated, may result in mental retardation

_____r. Pertaining to destruction of red blood cells

_____s. Treatment by exposure to light

15. Phototherapy
16. Phenylketonuria (PKU)
17. Phenylalanine
18. Hemolytic
19. Opisthotonos

2. List major types of anomalies.

a. ____________________

b. ____________________

c. ____________________

3. Describe characteristics, complications, prognosis, and nursing responsibilities for infant with Down's syndrome.

a. Characteristics-- ____________________

____

____

____

____

____

____

____

b. Complications-- ____________________

____

____

____

TEST

c. Prognosis-- ____________________

____

____

____

____

d. Nursing responsibilities-- ____________________

____

____

____

____

TEST

4. Describe causes, characteristics, complications, treatment, and nursing responsibilities for central-nervous-system anomalies by completing the chart below.

	HYDROCEPHALY	ANENCEPHALY	SPINA BIFIDA
Causes	a. ________	Unknown	Imperfect closure of or protrusion in back along spinal column; most common in lumbosacral area
Characteristics	Increase in head size to 14.9" or 37.8 cm (or more) in circumference, decrease in motor function, bulging fontanels, separation of suture lines, shiny scalp with distended veins, strabismus, "setting sun" eyes	b. ________	Obvious protrusion of part of spinal column, ranging in size from very small to very large; may leak spinal fluid
Complications	Size and weight of head increases; neck muscles become weak, unable to turn head; increasing intracranial pressure causes brain damage with symptoms such as irritability, vomiting, or convulsions; mental retardation	No chance for infant to survive	c. ________

TEST

	HYDROCEPHALY	ANENCEPHALY	SPINA BIFIDA
Treatment and nursing responsibilities	d. ______________________	Gently hold infant whenever possible or touch through isolette portholes	Surgical removal or repair of defect, rehabilitation, position to prevent pressure on site, change position frequently, cleanse perineum and treat to minimize irritation due to incontinence, protect site to prevent infection when leaking occurs, provide emotional stimulation

TEST

5. Discuss the incidence, symptoms, and treatment of congenital heart defects.

   a. Incidence-- ____

   ____

   ____

   b. Symptoms-- ____

   ____

   ____

   ____

   ____

   ____

   c. Treatment-- ____

   ____

   ____

   ____

6. Select from the following list characteristics of the classes of heart defects. Write an "X" in the blank before each correct answer.

   a. Acyanotic

   ______1) Shows peripheral cyanosis

   ______2) Indicates very little or no cyanosis, with oxygen saturation of more than 85 percent in the peripheral circulation

   ______3) Occurs in any heart defect where there is little or no mixing of oxygenated with unoxygenated blood

   ______4) Results in specific anemias of blood

   b. Cyanotic

   ______1) Indicates presence of noticeable cyanosis with oxygen saturation of less than 85 percent in the peripheral arterial circulation

   ______2) Occurs in any heart defect which allows unoxygenated blood from the right side of the heart to mix with oxygenated blood from the left side of the heart

TEST

_____3) Defect always occurs on left side of heart

_____4) Can occur at atrial, ventricular, or aortic level and with a combination of defects

_____5) Results in a spastic movement of circulating blood

7. Distinguish between acyanotic and cyanotic defects. Write an "A" in the blanks before acyanotic defects and a "C" in the blanks before cyanotic defects.

_____a. Coarctation of the aorta

_____b. Tetralogy of Fallot

_____c. Transposition of the great vessels

_____d. Patent ductus arteriosus

_____e. Atrial septal defect

_____f. Ventricular septal defect

8. State nursing responsibilities when caring for infant with cleft lip and/or palate.

a. ____________________

____

b. ____________________

____

c. ____________________

____

d. ____________________

____

e. ____________________

____

9. Describe treatment for anomalies of the musculoskeletal system.

a. Talipes-- ____________________

____

____

____

____

TEST

b. Congenital hip dislocation--______________________________

____

____

10. Select from the following list symptoms and treatment of ABO incompatibility disease. Write an "X" in the blank before each correct answer.

a. Symptoms

_____1) Jaundice within first forty-eight hours after birth

_____2) Cyanosis of hands and feet

_____3) Mild anemia

_____4) Elevation of cardiac enzyme

_____5) Negative or low Coombs' test

b. Treatment and nursing responsibilities

_____1) Radiotherapy

_____2) Exchange transfusion if bilirubin is high

_____3) Phototherapy

_____4) Chemotherapy

11. Discuss use of phototherapy in treatment of jaundice in the newborn.

____

____

____

____

____

____

12. Select from the following list indications of an Rh incompatibility or erythroblastosis fetalis. Write an "X" in the blank before each correct answer.

_____a. Yellow vernix caseosa

_____b. Anemia present at birth or soon after

_____c. Diarrhea

_____d. Jaundice within twenty-four hours after birth

TEST

______e. Vertigo

______f. Enlarged liver and spleen

______g. Positive Coombs' test

______h. Tinnitis

______i. Hypoxia

______j. Elevated bilirubinemia

______k. Rhinitis

______l. Lethargy

______m. Generalized weakness

13. Distinguish between complications of an Rh incompatibility. Write a "K" in the blanks before kernicterus and an "H" in the blanks before hydrops fetalis.

______a. Degeneration of central nervous tissue due to persistent high bilirubinemia

______b. Most severe form of erythroblastosis fetalis

______c. Symptoms include extreme lethargy, opisthotonos, convulsions, and a shrill, high-pitched cry

______d. Symptoms include excessive edema, marked anemia, jaundice, and enlargement of the liver and spleen

______e. Affected infants are stillborn or live only a short time

14. State nursing responsibilities in the treatment of an infant with Rh incompatibility.

a. ____

b. ____

c. ____

d. ____

e. ____

f. ____

15. Describe diagnosis and treatment of phenylketonuria (PKU).

a. Diagnosis-- ____

____

____

____

TEST

b. Treatment--

16. Describe causes and treatment of cretinism.

a. Causes--

b. Treatment--

17. Select from the following list characteristics of the newborn of a diabetic mother. Write an "X" in the blank before each correct answer.

_____a. Facial paralysis

_____b. Premature birth

_____c. Rigidity of muscles

_____d. Obese appearance due to generalized edema

_____e. Greater urinary output and weight loss than that of normal newborn

TEST

_____f. Hyperactivity

_____g. Poor muscle tone

_____h. Sunset eyes

_____i. Listlessness

_____j. Respiratory distress due to hyaline membrane disease and atelectasis

18. State nursing responsibilities in the treatment of the newborn of a diabetic mother.

a. ______________________________

____

b. ______________________________

____

c. ______________________________

____

d. ______________________________

____

19. List characteristics of newborn with an intracranial hemorrhage.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

g. ______________________________

h. ______________________________

i. ______________________________

TEST

20. Describe treatment and nursing responsibilities for newborn with an intracranial hemorrhage.

    a. Treatment-- ____________________

    b. Nursing responsibilities-- ____________________

21. Describe common nerve injuries of newborn.

    a. Facial paralysis-- ____________________

    b. Paralysis of upper arm or Erb's palsy-- ____________________

TEST

22. Discuss types of infections found in the newborn, their causes, symptoms, treatments, and nursing responsibilities by completing the chart below.

INFECTION	CAUSE	SYMPTOMS	TREATMENT	NURSING RESPONSIBILITIES
Thrush	Fungus infection, Candida albicans; may be contracted during birth from infected birth canal or may be transmitted by infected personnel who use poor aseptic technique	White patches that cannot be easily removed from mucous membranes of mouth	a. ____________	Isolate infant; observe intake (if there is much involvement, infant may not want to suckle); give water after feeding to aid in cleansing mouth
Congenital syphilis	b. ____________	Highly infectious skin lesions on face, palms, buttocks, or soles of feet; nasal discharge associated with sniffing sounds on inspiration; bleeding ulcerations on mucous membranes; enlargement of liver, spleen, and lymph nodes; tender joints; positive serology	Antibiotics	Isolate infant; administer antibiotics as prescribed

TEST

INFECTION	CAUSE	SYMPTOMS	TREATMENT	NURSING RESPONSIBILITIES
Epidemic diarrhea	Organisms of staphylococci or E. coli; overcrowding in nursery; poor personal hygiene of personnel or mothers; poor aseptic technique	c. ____	Antibiotics; prevent dehydration through IVs	Isolate any suspected case; maintain aseptic technique; record I and O; keep buttocks clean and dry
Rubella	Maternal infection during first trimester of pregnancy may result in one or more deformities of infant	d. ____	Infection can be spread to others; ears, heart, and eyes are most frequently affected	Treatment and prognosis will depend on type and severity of the deformity
Impetigo	Staphylococci, or streptococci organisms; break in aseptic technique; contact with infected person	Blebs which are most likely to develop in folds, creases, and moist surfaces	Administer antibiotics and ointments as prescribed	e. ____
Herpes 2	Herpesvirus hominis Type 2	f. ____	Delivery of infant by C-section; strict isolation technique; *no* curative treatment is available at present	Observe for symptoms, keep infant isolated, use gloves when caring for infant, treat symptoms to keep infant comfortable

TEST

23. State nursing actions that provide emotional support for parents of a newborn with an anomaly.

    a. ____

    ____

    b. ____

    ____

    c. ____

    ____

    d. ____

    ____

    e. ____

    ____

(NOTE: Test questions 24 and 25 list the assignment and job sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

24. Prepare case study of newborn with an anomaly.

25. Demonstrate the ability to administer phototherapy.

IMMEDIATE CARE OF THE NEWBORN WITH ANOMALIES
UNIT VI

ANSWERS TO TEST

1. a. 9
   b. 2
   c. 6
   d. 8
   e. 4
   f. 5
   g. 10
   h. 1
   i. 3
   j. 7
   k. 11
   l. 14
   m. 12
   n. 13
   o. 19
   p. 17
   q. 16
   r. 18
   s. 15

2. a. Congenital
   b. Birth injuries
   c. Infections

3. Description should include the following
   a. Characteristics
      1) Slanted eyes
      2) Flat nose
      3) Thick tongue which protrudes from the mouth
      4) Short hands with deep horizontal creases in palm and incurving fifth finger
      5) Decreased muscle tone
      6) Wide space between the first and second toes
      7) Short, broad neck and head
   b. Complications
      1) Heart or eye defects
      2) Retarded mental and physical development
      3) Poor resistance to infection
   c. Prognosis--Depending upon severity of other deformities and mental retardation, child may develop some self-help skills and have some degree of independent behavior

ANSWERS TO TEST

- d. Nursing responsibilities
  - 1) Feed with care
  - 2) Provide audio and visual stimulation and extra personal attention to assist infant to develop to fullest potential

4. Description should include the following

   - a. Obstruction in free circulation of cerebrospinal fluid; defective absorption of cerebrospinal fluid
   - b. Scalp and cranium may be missing; top part of head is very small or appears to be absent
   - c. Will vary depending on size and location, hydrocephaly, urinary or fecal incontinence, loss of motor control or sensation below site, club feet, congenital hip dislocation, infection
   - d. Surgical implantation of shunt to drain excess fluid into right atrium; shunts may have to be replaced several times; complications after surgery may include septicemia or pulmonary thrombosis; change infant's position frequently to prevent pressure areas or skin breakdown on bony prominences, head, and ears; support head and neck when lifting; feed carefully and slowly; measure head daily; provide stimulus to infant by talking and singing; provide lightweight, colorful toys

5. Discussion should include the following

   - a. Incidence
     - 1) Cause more infant deaths than any other anomaly
     - 2) May be slight enough to be asymptomatic and never detected
     - 3) May be surgically corrected in the majority of infants who survive
   - b. Symptoms
     - 1) Cyanosis
     - 2) Dyspnea
     - 3) Tachycardia
     - 4) Feeding difficulties or choking spells
     - 5) Failure to gain weight or strength
     - 6) Fatigue upon any activity

ANSWERS TO TEST

c. Treatment

   1) Medical to improve infant's condition

   2) Surgical repair done in stages, palliative as needed; corrective repair is usually delayed until preschool or school age

6. a. 2, 3

   b. 1, 2, 4

7. a. A d. A

   b. C e. A

   c. C f. A

8. a. Allow more time than usual for feedings

   b. Feed slowly with a soft-tipped syringe, rubber-tipped medicine dropper, Brecht feeder, or spoon

   c. Hold infant in an upright position to facilitate swallowing

   d. Assist infant to eruct frequently because the infant with a mouth deformity swallows more air than the average infant

   e. Use restraints as prescribed to prevent infant from scratching the site

9. Description should include the following

   a. Talipes

      1) Manipulation and exercise of extremities as prescribed by physician

      2) Corrective shoes or other devices prescribed and fitted by physician or trained persons

      3) Plaster cast applied to affected foot

      4) Surgical correction of deformity

   b. Congenital hip dislocation

      1) Manipulation of femur into place followed by application of a splint or cast

      2) Surgical correction if manipulation is delayed or unsuccessful

ANSWERS TO TEST

10. a. 1, 3, 5

    b. 2, 3

11. Discussion should include the following

    a. Light therapy reduces bilirubin levels in blood and prevents brain damage due to kernicterus

    b. Process is not completely understood, but it is known that photo-oxidation of bilirubin occurs in skin and not in plasma; light thus converts bilirubin to a colorless, polar, water-soluble compound which can readily be excreted in urine

12. a, b, d, f, g, j, l, m

13. a. K   d. H

    b. H   e. H

    c. K

14. a. Observe all neonates for jaundice; report to the physician immediately when jaundice occurs

    b. Change position frequently to avoid atelectasis

    c. Prevent secondary infection

    d. Omit feedings as prescribed before transfusions

    e. Observe carefully for signs of shock following transfusions

    f. Observe fluid intake, oral and/or parenteral

15. Description should include the following

    a. Diagnosis

        1) Guthrie blood test is used after infant has received feedings for at least twenty-four hours, usually the third or fourth day after birth

        2) Test is repeated in four or five weeks if positive

        3) Oklahoma state law requires performance of test on all neonates

ANSWERS TO TEST

b. Treatment

1) Early recognition of the disease increases chances of recovery

2) Administration of low phenylalanine formula/diet as soon as condition is diagnosed

16. Description should include the following

a. Causes

1) Absence of thyroid gland

2) Defective production of thyroxin

3) Maternal ingestion of medication which suppresses thyroid function

b. Treatment

1) Administration of a thyroid preparation is necessary throughout life

2) Early treatment and adequate dosage permit fairly normal physical growth and mental development

17. b, d, e, g, i, j

18. a. Monitor blood glucose determinations at birth and every two to four hours until glucose level is stable

b. Suction respiratory tract as needed because respiratory secretions are also increased

c. Place infant in incubator and treat as premature, regardless of size

d. Administer glucose intravenously if blood sugar is abnormally low

19. a. Weak, shrill, or high-pitched cry

b. Poor reflexes

c. Thrashing movements of extremities

d. Periods of apnea and cyanosis

e. Difficult respirations

f. Poor sucking reflex

ANSWERS TO TEST

  g. Vomiting
  h. Bulging or tense fontanels
  i. Convulsions

20. Description should include the following
  a. Treatment
    1) Cranial pressure may be relieved by spinal or dural taps
    2) Elevation of head of bed helps reduce cerebral venous pressure
    3) Anticonvulsive medication may be ordered
    4) Vitamin K may be given to minimize bleeding
  b. Nursing responsibilities
    1) Handle gently and as little as possible
    2) Avoid loud noises or jarring infant
    3) Keep infant in incubator or isolette to provide a regulated atmosphere
    4) Withhold feedings until condition is stabilized
    5) Maintain close observation of vital signs and general behavior

21. Description should include the following
  a. Facial paralysis
    1) Characteristics
      a) No movement in muscles on affected side
      b) Mouth pulls toward unaffected side
    2) Treatment--Recovery is spontaneous, usually without any residual damage
  b. Paralysis of upper arm or Erb's palsy
    1) Characteristics
      a) Arm does not move
      b) Muscles in affected arm are flaccid

ANSWERS TO TEST

2) Treatment
    - a) Positioning and support of affected arm
    - b) Physical therapy
    - c) Surgery if nerve is severely damaged

22. Discussion should include the following
    - a. Antibiotics; gentian violet solution to affected areas
    - b. Transfer of spirochete Treponema pallidum through placenta of an infected mother
    - c. Sudden onset of watery, yellowish-green stools
    - d. Cultures of rubella virus may be obtained from pharyngeal secretions, urine, cerebrospinal fluid, and other secretions or tissues
    - e. Isolate infant, maintain aseptic technique, remove crusts with soap and water, apply ointment, give antibiotics, prevent dehydration
    - f. Fever, coryza, tachycardia, hemorrhage, lesions that appear as vesicles

23. a. Allow time for parents to ask questions and express fears and feelings
    - b. Permit parents to assist with infant care as much as possible
    - c. Instruct in any special aspects of infant care
    - d. Report any specific concerns to the proper person
    - e. Be aware of community agencies and national organizations that offer assistance for children or parents of children with unusual problems, and inform parents of such organizations

24. Evaluated to the satisfaction of the instructor

25. Performance skills evaluated to the satisfaction of the instructor

GROWTH AND DEVELOPMENT OF THE INFANT
UNIT I

UNIT OBJECTIVE

After completing this unit, the student should be able to plan and provide nursing care for infants. This knowledge will be shown by completing the assignment sheets and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with growth and development of the infant to their correct definitions.
2. Describe the overall growth period of the infant.
3. Describe Erikson's developmental stage of "trust versus mistrust."
4. State factors that influence the infant's emotional development.
5. State adverse influences on the development of the infant.
6. State factors that influence the infant's motor development.
7. Describe common effects of illness on infants and children.
8. Describe characteristics of physical and social development for the infant of one month to one year.
9. State ways to care for infant including diet, sleep, and activity.
10. Assess growth and development patterns of selected infants.
11. Plan care for an infant.

GROWTH AND DEVELOPMENT OF THE INFANT
UNIT I

SUGGESTED ACTIVITIES

I. Suggested activities

  A. Order materials planned to supplement unit.

    1. Films

      a. *The Amazing Newborn.* Color, 25 minutes.

      b. *Auditory Screening of Infants.* Color, 15 minutes.

      c. *Developmental Evaluation in Infancy (Part 1).* Black and white, 50 minutes. 1966.

      d. *Developmental Evaluation in Infancy (Part 2).* Black and white, 20 minutes. 1968.

      (NOTE: The above films are available to Oklahoma instructors from the Oklahoma State Department of Health, N.E. 10th and Stonewall, Oklahoma City, Oklahoma 73117.)

    2. Filmstrip--*Human Development: First 2 1/2 Years.* Available from Concept Media, P. O. Box 19542, Irvine, California 92714.

    3. Growth charts available from Department of Health, Education and Welfare, Public Health Service, Health Resource Administration, National Center for Health Statistics, and Center for Disease Control.

  B. Provide students with objective sheet.

  C. Provide students with information and assignment sheets.

  D. Discuss unit and specific objectives.

  E. Discuss information and assignment sheets.

  F. Review Erikson's developmental stages.

  G. Develop appropriate learning activities for special-needs students.

  H. Visit a day-care center to observe infants.

  I. Use growth charts to assess growth of infants.

  J. Invite mothers with infants to visit class to provide students the opportunity of observing the activities of various stages of infant growth.

  K. Give test.

  L. Reteach if necessary.

SUGGESTED ACTIVITIES

II. Instructional materials

  A. Objective sheet

  B. Suggested activities

  C. Information sheet

  D. Assignment sheets

    1. Assignment Sheet #1--Assess Growth and Development Patterns of Selected Infants

    2. Assignment Sheet #2--Plan Care for an Infant

  E. Answers to assignment sheets

  F. Test

  G. Answers to test

III. Unit references

  A. Pringle, Sheila, and Brenda Ramsey. *Promoting the Health of Children*. St. Louis: The C.V. Mosby Company, 1982.

  B. Marlow, Dorothy. *Textbook of Pediatric Nursing*. St. Louis: The C.V. Mosby Company, 1977.

  C. Whaley, Lucille, and Donna Wong. *Essentials of Pediatric Nursing*. St. Louis: The C.V. Mosby Company, 1982.

GROWTH AND DEVELOPMENT OF THE INFANT
UNIT I

INFORMATION SHEET

I. Terms and definitions

   A. Maturation--Process of coming to full development

   B. Motor--Pertaining to any activity or behavior involving muscular movement

   C. Deciduous teeth--Primary teeth, twenty in number, which are replaced by permanent teeth; also called *baby teeth*

   D. Dentition--Process of teething

   E. Erikson's developmental theory--Eight stages of life critical in human psychosocial development; tasks are struggles between negatives and positives

II. Overall growth period of the infant

   A. Physical and physiological changes

      1. Infant experiences many physical and physiological changes that occur rapidly

         (NOTE: Internal and external adjustments are taking place in the first twelve months.)

      2. By one year of age, infants usually triple their birth weight, and their height increases to about one and one-half times their birth length

   B. Socialization

      1. Infant develops a sense of trust or mistrust and learns to distinguish among mother, father, siblings, and strangers

      2. By end of the first year, infant has developed sociability and enjoys pleasurable relationships with others

      3. Infant may begin to respond to limitations set by parents that provide structure in their lives

III. Erikson's developmental stage of "trust versus mistrust"

   (NOTE: The infant from birth to one year of age succeeds in forming trusting relationships with significant others. If the infant is hospitalized during this time, these relationships must continue to be made with the caregiver[s].)

   A. Trust

      1. Established in first year of life when child's experiences are satisfying

INFORMATION SHEET

2. Exists only in relation to something or someone

   EXAMPLE: Loving care given by a significant person is an essential part in development of trust.

B. Mistrust

1. Established when trust-promoting experiences are unfulfilled or inconsistent

2. Mistrust of significant caregiver may result in a basic mistrust of outside world

IV. Factors that influence the infant's emotional development

(NOTE: Fulfillment of the infant's physical and emotional needs is essential to development.)

A. Variety of learning experiences

B. Warmth and affection or lack of it

C. Strengthening of initial bonding between infant and mother

D. Symbolic bonding between infant and other significant family members

E. Development of sense of trust

F. Learning limits of behavior expected of him or her

V. Adverse influences on development of the infant

A. Illness

B. Anomalies

C. Lack of attention and affection

D. Rigid schedules

E. Inadequate visual, audio, or tactile stimulation

F. Separation from home and family

VI. Factors that influence the infant's motor development

(NOTE: The pattern of motor development occurs in predictable stages and, if completed, promotes good physical health, provides release for emotional stress, helps the child to achieve independence and to entertain self, and contributes to socialization.)

EXAMPLE: At three or four months, an infant usually looks at an object but does not reach for it; a little later the infant reaches, then scoops object into palm, and finally picks it up in a grasping movement. At about nine months, the infant has perfected the pincers grasp between thumb and finger and is able to use it in picking up small or large objects.

INFORMATION SHEET

A. Various motor performances such as reaching, grasping, and use of thumb developing in a predictable sequence

(NOTE: Motor development depends on maturation and learning; therefore, voluntary coordinated action is learned only after the involved musculature has matured sufficiently.)

B. Nervous system and muscles developing before skilled movements are taught

C. Motor development proceeding from head to foot, from proximal to distal, and from general to specific

D. Individual differences such as sex, opportunity, general health, and amount of stimulation

VII. Common effects of illness on infants and children

A. Physical growth and development

1. Short illnesses seldom have a permanent effect

2. Long, severe illnesses may stunt physical growth or cause metabolic disturbances

3. Most illnesses are accompanied by a temporary loss of weight

4. Muscles lose tone and strength due to inactivity during illness

5. Some illnesses may cause permanent damage

EXAMPLES: Rheumatic fever, polio

B. Emotional behavior

1. Illness always upsets homeostasis, making child irritable and subject to distress or anxiety

2. Many children become accustomed to the special attention received during illness and become assertive and demanding following recovery

3. Severe lack of love and mothering in institutional or home environment stunts emotional growth and capacity for social relationships

C. Social behavior

1. Constant attention may cause child to develop an unhealthy attitude concerning own importance

2. Lack of stimulation results in apathy

D. Physical ability and activity

1. Restriction of activity may be frustrating to child

2. Prolonged restriction of activity slows physical maturation

INFORMATION SHEET

E. Personality

1. Chronic or severe illnesses or injuries may damage personality formation.

2. Illnesses that prevent stimulation may cause child to be withdrawn or passive

VIII. Characteristics of physical and social development for the infant of one month to one year (Assignment Sheets #1 and #2)

A. One month

1. Physical development

   a. Regains weight lost after birth; grows one inch

   b. Lifts and turns head but lacks complete control

   c. Clenches fists

   d. Watches bright lights or light-colored objects

2. Social development

   a. Cries when hungry or uncomfortable; stops crying when comfortable or satisfied

   b. Makes small, throaty noises

   c. Sleeps eighteen to twenty hours per day

B. Two months

1. Physical development

   a. Posterior fontanel closes

   b. Holds head erect

   c. Follows moving objects with eyes

   d. Holds an object briefly

   e. Moves arms and legs vigorously

   f. Sheds tears when crying

2. Social development

   a. Smiles at familiar person

   b. Stops crying when picked up

INFORMATION SHEET

- c. Begins making purposeful movements
- d. Enjoys being with others

C. Three months

1. Physical development
    - a. Holds weight on arms in prone position
    - b. Discovers hands
    - c. Follows objects from side to side and up and down
    - d. Supports head well
    - e. Turns from abdomen to back
2. Social development
    - a. Cries less
    - b. Smiles readily
    - c. Enjoys having people talk
    - d. Desires companionship

D. Four months

1. Physical development
    - a. May begin to drool
    - b. Lifts head and shoulders well in prone position
    - c. Turns from back to side or abdomen
    - d. Sits with support
    - e. Reaches for objects
    - f. Begins coordination between eye and body movements
    - g. May begin to drink from cup or glass
2. Social development
    - a. Coos, chuckles, gurgles, blows bubbles
    - b. Laughs aloud
    - c. Performs for others
    - d. Enjoys social play

INFORMATION SHEET

E. Five months

1. Physical development

    a. Doubles birth weight

    b. Sits well with support

    c. Grasps objects

    d. Puts everything into mouth

    e. Bounces and bears weight when held in standing position

2. Social development

    a. Talks to self or toys

    b. Recognizes whether people are familiar or unfamiliar

    c. Discovers feet

    d. Plays alone contentedly but has sudden, short-lived reaction to such frustrations as dropping a toy or having mother leave

F. Six months

1. Physical development

    a. Sits alone for short period of time

    b. Turns completely over

    c. Bangs table with rattle or other toys

    d. Pulls self to sitting position

2. Social development

    a. Cries loudly when displeased

    b. Notices activity and nearby objects

    c. Bubbles and squeals

    d. Sucks food from a spoon

    e. Laughs aloud frequently

    f. Enjoys splashing in water

    g. Likes company and attention

INFORMATION SHEET

G. Seven months

1. Physical development
    a. Begins dentition with two lower central incisors, which are the first of the deciduous teeth
    b. Begins to crawl
    c. Increases motor skills
    d. Enjoys active play such as being bounced on someone's knee
2. Social development
    a. Becomes aware of strangers
    b. May show a preference for one family member
    c. Shifts moods easily from crying to laughing

H. Eight months

1. Physical development
    a. Changes position easily from lying to sitting to crawling
    b. Increases use of finger and thumb pincer action
    c. Enjoys dropping toys from play area to be retrieved by another
    d. Plays for extended periods alone
2. Social development
    a. Prefers being with others
    b. Expresses impatience, especially when hungry
    c. Initiates play such as pat-a-cake for attention

I. Nine months

1. Physical development
    a. Shows preference for one hand
    b. Holds bottle
    c. Crawls well

INFORMATION SHEET

2. Social development
    a. Tries to imitate sounds
    b. Babbles in conversational manner
    c. Cries if scolded
    d. Tries to feed self
    e. Responds enthusiastically to attention

J. Ten months
  1. Physical development
    a. Pulls to a standing position
    b. Throws toys and expects them to be returned
    c. Walks around playpen or furniture
    d. Learns new activities quickly
  2. Social development
    a. Responds to own name
    b. Enjoys feeding self with fingers
    c. Plays simple games
    d. Observes activity of others and tries to imitate

K. Eleven months
  1. Physical development
    a. Walks holding on to furniture or another person with one hand
    b. Coordinates activities increasingly well
  2. Social development
    a. Understands simple directions
    b. Becomes impatient when held or confined
    c. Enjoys playing with food and utensils
    d. Becomes increasingly curious

INFORMATION SHEET

L. One year

1. Physical development
    a. Pulse 100 to 140; respirations 20 to 40
    b. Birth weight is tripled; height approximately 30 inches
    c. Stands alone for short periods
    d. Walks several steps before falling
    e. May assist in dressing
    f. Has six teeth, four above and two below
2. Social development
    a. Understands much that is said and can say several words
    b. Repeats behavior that receives approval or disapproval
    c. Recognizes "No! No!"
    d. Repeats many words when prompted
    e. Shows emotions such as fear, anger, and jealousy
    f. Reacts to moods of adults or siblings
    g. Plays with food

INFORMATION SHEET

IX. Ways to care for infant including diet, sleep, and activity

(NOTE: Pediatrician may recommend different methods for these areas of care.)

AGE	DIET	SLEEP	ACTIVITY
One month	Provide breast feedings or formula every three to four hours with plain water between feedings on demand; bubble infant well after each feeding	Use firm mattress and no pillow under head; place on abdomen or side after feeding	Provide stimulation by smiling and talking to infant during care; support infant's head and back; provide touch stimulation often
Two months (NOTE: First DPT and TOPV immunizations [diptheria, tetanus toxoid and pertussive, and trivalent oral poliovirus] are given at this age.)	Offer solid foods, usually cereals and strained foods; offer new foods one at a time when infant is hungry; be sure to place foods well back on tongue	Expect infant to develop patterns of being awake for longer periods; may be awake for 2:00 A.M. feeding	Provide safe, flat surface for exercise; hang brightly colored pictures or toys in range of vision; place infant where activities of others can be observed.
Three months	Offer larger amounts of food gradually; may give green and yellow vegetables, strained meats; can discontinue 2 A.M. feeding	Expect infant to sleep all night and to nap frequently during the day	Place infant in semisitting position--as in an infant seat--making sure that seat is secure and will not tip over; place infant in prone position on floor or in crib; place toys or mobiles where infant can see them

INFORMATION SHEET

AGE	DIET	SLEEP	ACTIVITY
Four months (NOTE: Second DPT and TOPV immunizations are given at this age.)	Observe infant for preference of certain foods; new foods with more texture may be added to diet	Expect infant to move about more during sleep and to be able to sleep through ordinary noises	Place rattles or dangling toys within reach; use infant tub for baths to provide exercise; place soft toys in crib; place infant near mirror
Five months	Add custard, gelatin desserts and other puddings to diet; allow infant to hold bottle	Allow for two or three naps during the day	Provide smooth or soft toys; avoid loose buttons or toys with eyes that may pull loose
Six months (NOTE: Third DPT is given at this time.)	Include cereal, egg yolk, a variety of fruits, meat, vegetables; place infant in highchair for feedings; begin to use a cup for liquids	Provide for naps even though infant may protest	Place infant in chair or playpen while awake and put in crib for naps and sleep; play peek-a-boo and pat-a-cake with infant; provide large nesting or stacking toys (CAUTION: Safety precautions should be taken to protect infant from crawling or falling out of bed, down stairs, or in the tub. Also prevent infant from chewing on soiled or painted objects.)
Seven months	Increase amounts of foods; add finger foods; note decrease of appetite when teething begins	Expect infant to sleep on the average of eleven to thirteen hours per night, and perhaps to be fretful and restless due to discomfort of teething	Provide safe place for active exercise, either on the floor or in a playpen; provide two or three toys at a time, exchanging them occasionally to add variety; provide firm toys for chewing as teeth begin to appear

INFORMATION SHEET

AGE	DIET	SLEEP	ACTIVITY
Eight months	Continue to add new foods to diet; allow infant to hold spoon and feed self if possible	Expect infant to be active and wakeful for longer periods and to sleep all night	Provide jump chair or walker, noisy rattles, or squeak toys
Nine months	Give chopped and mashed table foods; encourage infant to feed self finger foods **(CAUTION: Use unbreakable dishes.)**	Set definite bedtime and nap times although infant will protest at times	Provide safe room for creeping and exploring; put covers on electrical outlets; observe carefully as infant can pull things over as he or she tries to pull self up
Ten months	Continue giving solid foods; encourage infant to hold own glass or cup	Provide for a quiet time before bedtime; may hear infant cry out in sleep but he or she will not awaken	Select clothing that is loose enough to permit freedom of movement; assist infant in learning to walk
Eleven months	Allow infant to feed self	Observe for infant taking shorter naps and becoming more active	Supervise activities as infant is curious and mobile; move any harmful substances out of reach
One year	Expect decreased interest in food as infant increases activity and interest in environment	Provide eleven to twelve hours per night for sleep	Provide time for walking and playing outdoors with supervision; encourage new experiences and activities

GROWTH AND DEVELOPMENT OF THE INFANT
UNIT I

ASSIGNMENT SHEET #1--ASSESS GROWTH AND DEVELOPMENT PATTERNS OF SELECTED INFANTS

NAME ______________________________ SCORE __________

Predicted growth and development patterns have been identified for each age group. However, each infant has his or her own distinct pattern of growth and may not follow exactly the steps outlined in this unit. Some infants will be ahead of schedule in some areas and behind in others yet still be healthy, well-adjusted children.

In this unit, you have been given specific developmental tasks for each month of life to one year. To complete this assignment sheet, you will need to select two children of the same age and assess their growth compared with the "norms" given in this unit. Use this assignment sheet to document your data. It is best to select children other than your own. If at all possible, visit a day-care center and select two children from that age group.

ASSIGNMENT SHEET #1

AGE ____________ CHILD #1 NAME OR INITIALS ____________

PHYSICAL DEVELOPMENT PREDICTED FOR THIS AGE	DEVELOPMENT OBSERVED

ASSIGNMENT SHEET #1

AGE ________ CHILD #1 NAME OR INITIALS ________

SOCIAL DEVELOPMENT PREDICTED FOR THIS AGE	DEVELOPMENT OBSERVED

20-D

ASSIGNMENT SHEET #1

AGE ________ CHILD #2 NAME OR INITIALS________

PHYSICAL DEVELOPMENT PREDICTED FOR THIS AGE	DEVELOPMENT OBSERVED

PN II - 21-D

ASSIGNMENT SHEET #1

AGE __________ CHILD #2 NAME OR INITIALS__________

SOCIAL DEVELOPMENT PREDICTED FOR THIS AGE	DEVELOPMENT OBSERVED

GROWTH AND DEVELOPMENT OF THE INFANT
UNIT I

ASSIGNMENT SHEET #2--PLAN CARE FOR AN INFANT

NAME ______________________________ SCORE ______________

The nine-month-old infant is a more social being and is much more active physically than a younger infant. There are many changes occurring at this stage, and the normal pattern of growth and development should be considered when this infant is hospitalized.

Using the information in this unit and other resources, fill out the care plan on the following pages. Hand in to instructor for evaluation.

EXAMPLE:

CARE PLAN

PHYSICAL DEVELOPMENT AND NEEDS	APPROACH OR NURSING ACTION
Mobility increases and appetite decreases	Provide a safe place to allow freedom of exercise
Teeth erupt on an average of one per month from six to twelve months	Offer finger foods
	Offer bedtime bottle of water if needed; refrain from giving liquids that contain sugar as it predisposes to dental caries
SOCIAL DEVELOPMENT	ACTIVITY
Develops an attachment to a favorite toy or "security blanket"	Allow child to keep secure items within reach
Begin to assert themselves more frequently	Begin and/or continue setting limits; be consistent when giving care

ASSIGNMENT SHEET #2

CARE PLAN

PHYSICAL DEVELOPMENT AND NEEDS	APPROACH OR NURSING ACTION

ASSIGNMENT SHEET #2

SOCIAL DEVELOPMENT	ACTIVITY

GROWTH AND DEVELOPMENT OF THE INFANT
UNIT I

ANSWERS TO ASSIGNMENT SHEETS

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

Assignment Sheet #2--Evaluated to the satisfaction of the instructor

GROWTH AND DEVELOPMENT OF THE INFANT
UNIT I

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with growth and development of the infant to their correct definitions. Write the correct numbers in the blanks.

    _____a. Primary teeth, twenty in number, which are replaced by permanent teeth; also called *baby teeth*

    _____b. Pertaining to any activity or behavior involving muscular movement

    _____c. Process of teething

    _____d. Process of coming to full development

    _____e. Eight stages of life critical in human psychosocial development; tasks are struggles between negatives and positives

    1. Dentition
    2. Maturation
    3. Motor
    4. Deciduous teeth
    5. Erikson's developmental theory

2. Describe the overall growth period of the infant.

    a. Physical and physiological changes--______________________________

    ____

    ____

    ____

    ____

    ____

    b. Socialization-- ______________________________________

    ____

    ____

    ____

    ____

    ____

    ____

    ____

TEST

3. Describe Erikson's developmental stage of "trust versus mistrust."

   a. Trust--

   b. Mistrust--

4. State factors that influence the infant's emotional development.

   a.

   b.

   c.

   d.

   e.

   f.

5. State adverse influences on the development of the infant.

   a.

   b.

   c.

   d.

   e.

   f.

6. State factors that influence the infant's motor development.

   a.

   b.

TEST

c. ____________________

____

____

d. ____________________

____

____

7. Describe common effects of illness on infants and children.

a. Physical growth and development--____________________

____

____

____

____

____

____

b. Emotional behavior--____________________

____

____

____

____

____

____

____

c. Social behavior--____________________

____

____

____

____

TEST

d. Physical ability and activity--

e. Personality--

8. Describe two characteristics each of physical and social development for the infant of one month to one year.

   a. One month

      1) Physical development--

      2) Social development--

   b. Two months

      1) Physical development--

      2) Social development--

   c. Three months

      1) Physical development--

TEST

2) Social development--____

____

____

d. Four months

1) Physical development--____

____

____

2) Social development--____

____

____

e. Five months

1) Physical development--____

____

____

2) Social development--____

____

____

f. Six months

1) Physical development--____

____

____

2) Social development--____

____

____

g. Seven months

1) Physical development--____

____

____

TEST

2) Social development--

h. Eight months

1) Physical development--

2) Social development--

i. Nine months

1) Physical development--

2) Social development--

j. Ten months

1) Physical development--

2) Social development--

k. Eleven months

1) Physical development--

TEST

2) Social development--____________________________________

____

____

I. One year

1) Physical development--__________________________________

____

____

2) Social development--____________________________________

____

____

TEST

9. State ways to care for infant including diet, sleep, and activity.

AGE	DIET	SLEEP	ACTIVITY
One month	Provide breast feedings or formula every three to four hours with plain water between feedings on demand; bubble infant well after each feeding	a.	Provide stimulation by smiling and talking to infant during care; support infant's head and back; provide touch stimulation often
Two months	b.	Expect infant to develop patterns of being awake for longer periods; may be awake for 2:00 A.M. feeding	Provide safe, flat surface for exercise; hang brightly colored pictures or toys in range of vision; place infant where activities of others can be observed.
Three months	Offer larger amounts of food gradually; may give green and yellow vegetables, strained meats; can discontinue 2 A.M. feeding	Expect infant to sleep all night and to nap frequently during the day	c.
Four months	d.	Expect infant to move about more during sleep and to be able to sleep through ordinary noises	Place rattles or dangling toys within reach; use infant tub to provide exercise; place soft toys in crib; place infant near mirror

TEST

AGE	DIET	SLEEP	ACTIVITY
Five months	Add custard, gelatin desserts and other puddings to diet; allow infant to hold bottle	Allow for two or three naps during the day	e.______________
Six months	f.______________	Provide for naps even though infant may protest	Place infant in chair or playpen while awake and put in crib for naps and sleep; play peek-a-boo and pat-a-cake with infant; provide large nesting or stacking toys
Seven months	Increase amounts of foods; add finger foods; note decrease of appetite when teething begins	g.______________	Provide safe place for active exercise, either on the floor or in a playpen; provide two or three toys at a time, exchanging them occasionally to add variety; provide firm toys for chewing as teeth begin to appear
Eight months	Continue to add new foods to diet; allow infant to hold spoon and feed self if possible	Expect infant to be active and wakeful for longer periods and to sleep all night	h.______________
Nine months	i.______________	Set definite bedtime and nap times although infant will protest at times	Provide safe room for creeping and exploring; put covers on electrical outlets; observe carefully as infant can pull things over as he or she tries to pull self up

TEST

AGE	DIET	SLEEP	ACTIVITY
Ten months	Continue giving solid foods; encourage infant to hold own glass or cup	j.________________	Select clothing that is loose enough to permit freedom of movement; assist infant in learning to walk
Eleven months	Allow infant to feed self	Observe for infant taking shorter naps and becoming more active	k.________________
One year	l.________________	Provide eleven to twelve hours per night for sleep	Provide time for walking and playing outdoors with supervision; encourage new experiences and activities

TEST

(NOTE: Test questions 10 and 11 list the assignment sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

10. Assess growth and development patterns of selected infants.

11. Plan care for an infant.

GROWTH AND DEVELOPMENT OF THE INFANT
UNIT I

ANSWERS TO TEST

1. a. 4 d. 2
   b. 3 e. 5
   c. 1

2. Descriptions should include the following
   a. Physical and physiological changes
      1) Infant experiences many physical and physiological changes that occur rapidly
      2) By one year of age, infants usually triple their birth weight, and their height increases to about one and one-half times their birth length
   b. Socialization
      1) Infant develops a sense of trust or mistrust and learns to distinguish among mother, father, siblings, and strangers
      2) By end of the first year, infant has developed sociability and enjoys pleasurable relationships with others
      3) Infant may begin to respond to limitations set by parents that provide structure in their lives

3. Descriptions should include the following
   a. Trust
      1) Established in first year of life when child's experiences are satisfying
      2) Exists only in relation to something or someone
   b. Mistrust
      1) Established when trust-promoting experiences are unfulfilled or inconsistent
      2) Mistrust of significant caregiver may result in a basic mistrust of outside world

4. a. Variety of learning experiences
   b. Warmth and affection or lack of it
   c. Strengthening of initial bonding between infant and mother

ANSWERS TO TEST

- d. Symbolic bonding between infant and other significant family members
- e. Development of sense of trust
- f. Learning limits of behavior expected of him or her

5. a. Illness
   - b. Anomalies
   - c. Lack of attention and affection
   - d. Rigid schedule
   - e. Inadequate visual, audio, or tactile stimulation
   - f. Separation from home and family

6. a. Various motor performances such as reaching, grasping, and use of thumb developing in a predictable sequence
   - b. Nervous system and muscles developing before skilled movements are taught
   - c. Motor development proceeding from head to foot, from proximal to distal, and from general to specific
   - d. Individual differences such as sex, opportunity, general health, and amount of stimulation

7. Descriptions should include the following
   - a. Physical growth and development
     - 1) Short illnesses seldom have a permanent effect
     - 2) Long, severe illnesses may stunt physical growth or cause metabolic disturbances
     - 3) Most illnesses are accompanied by a temporary loss of weight
     - 4) Muscles lose tone and strength due to inactivity during illness
     - 5) Some illnesses may cause permanent damage
   - b. Emotional behavior
     - 1) Illness always upsets homeostasis, making child irritable and subject to distress or anxiety
     - 2) Many children become accustomed to the special attention received during illness and become assertive and demanding following recovery

ANSWERS TO TEST

3) Severe lack of love and mothering in institutional or home environment stunts emotional growth and capacity for social relationships

c. Social behavior

   1) Constant attention may cause child to develop an unhealthy attitude concerning own importance

   2) Lack of stimulation results in apathy

d. Physical ability and activity

   1) Restriction of activity may be frustrating to child

   2) Prolonged restriction of activity slows physical maturation

e. Personality

   1) Chronic or severe illnesses or injuries may damage personality formation

   2) Illnesses that prevent stimulation may cause child to be withdrawn or passive

8. Answer should include two each of the following

   a. One month

      1) Physical development

         a) Regains weight lost after birth; grows one inch

         b) Lifts and turns head but lacks complete control

         c) Clenches fists

         d) Watches bright lights or light-colored objects

      2) Social development

         a) Cries when hungry or uncomfortable; stops crying when comfortable or satisfied

         b) Makes small, throaty noises

         c) Sleeps eighteen to twenty hours per day

   b. Two months

      1) Physical development

         a) Posterior fontanel closes

         b) Holds head erect

ANSWERS TO TEST

        c) Follows moving objects with eyes
        d) Holds an object briefly
        e) Moves arms and legs vigorously
        f) Sheds tears when crying
    2) Social development
        a) Smiles at familiar person
        b) Stops crying when picked up
        c) Begins making purposeful movements
        d) Enjoys being with others

c. Three months
    1) Physical development
        a) Holds weight on arms in prone position
        b) Discovers hands
        c) Follows objects from side to side and up and down
        d) Supports head well
        e) Turns from abdomen to back
    2) Social development
        a) Cries less
        b) Smiles readily
        c) Enjoys having people talk
        d) Desires companionship

d. Four months
    1) Physical development
        a) May begin to drool
        b) Lifts head and shoulders well in prone position
        c) Turns from back to side or abdomen
        d) Sits with support

ANSWERS TO TEST

- e) Reaches for objects
- f) Begins coordination between eye and body movements
- g) May begin to drink from cup or glass

2) Social development
   - a) Coos, chuckles, gurgles, blows bubbles
   - b) Laughs aloud
   - c) Performs for others
   - d) Enjoys social play

e. Five months

1) Physical development
   - a) Doubles birth weight
   - b) Sits well with support
   - c) Grasps objects
   - d) Puts everything into mouth
   - e) Bounces and bears weight when held in standing position

2) Social development
   - a) Talks to self or toys
   - b) Recognizes whether people are familiar or unfamiliar
   - c) Discovers feet
   - d) Plays alone contentedly but has sudden, short-lived reaction to such frustrations as dropping a toy or having mother leave

f. Six months

1) Physical development
   - a) Sits alone for short period of time
   - b) Turns completely over
   - c) Bangs table with rattle or other toys
   - d) Pulls self to sitting position

ANSWERS TO TEST

- 2) Social development
  - a) Cries loudly when displeased
  - b) Notices activity and nearby objects
  - c) Bubbles and squeals
  - d) Sucks food from a spoon
  - e) Laughs aloud frequently
  - f) Enjoys splashing in water
  - g) Likes company and attention

g. Seven months

- 1) Physical development
  - a) Begins dentition with two lower central incisors, which are the first of the deciduous teeth
  - b) Begins to crawl
  - c) Increases motor skills
  - d) Enjoys active play such as being bounced on someone's knee
- 2) Social development
  - a) Becomes aware of strangers
  - b) May show a preference for one family member
  - c) Shifts moods easily from crying to laughing

h. Eight months

- 1) Physical development
  - a) Changes position easily from lying to sitting to crawling
  - b) Increases use of finger and thumb pincer action
  - c) Enjoys dropping toys from play area to be retrieved by another
  - d) Plays for extended periods alone
- 2) Social development
  - a) Prefers being with others
  - b) Expresses impatience, especially when hungry
  - c) Initiates play such as pat-a-cake for attention

ANSWERS TO TEST

i. Nine months
  1) Physical development
    a) Shows preference for one hand
    b) Holds bottle
    c) Crawls well
  2) Social development
    a) Tries to imitate sounds
    b) Babbles in conversational manner
    c) Cries if scolded
    d) Tries to feed self
    e) Responds enthusiastically to attention

j. Ten months
  1) Physical development
    a) Pulls to standing position
    b) Throws toys and expects them to be returned
    c) Walks around playpen or furniture
    d) Learns new activities quickly
  2) Social development
    a) Responds to own name
    b) Enjoys feeding self with fingers
    c) Plays simple games
    d) Observes activity of others and tries to imitate

k. Eleven months
  1) Physical development
    a) Walks holding on to furniture or another person with one hand
    b) Coordinates activities increasingly well

ANSWERS TO TEST

- 2) Social development
  - a) Understands simple directions
  - b) Becomes impatient when held or confined
  - c) Enjoys playing with food and utensils
  - d) Becomes increasingly curious

I. One year

- 1) Physical development
  - a) Pulse 100 to 140; respirations 20 to 40
  - b) Birth weight is tripled; height approximately 30 inches
  - c) Stands alone for short periods
  - d) Walks several steps before falling
  - e) May assist in dressing
  - f) Has six teeth, four above and two below
- 2) Social development
  - a) Understands much that is said and can say several words
  - b) Repeats behavior that receives approval or disapproval
  - c) Recognizes "No! No!"
  - d) Repeats many words when prompted
  - e) Shows emotions such as fear, anger, and jealousy
  - f) Reacts to moods of adults or siblings
  - g) Plays with food

9. a. Use firm mattress and no pillow under head; place on abdomen or side after feeding

   b. Offer solid foods, usually cereals and strained foods; offer new foods one at a time when infant is hungry; be sure to place foods well back on tongue

   c. Place infant in semisitting position--as in an infant seat--making sure that seat is secure and will not tip over; place infant in prone positon on floor or in crib; place toys or mobiles where infant can see them

   d. Observe infant for preference of certain foods; new foods with more texture may be added to diet

ANSWERS TO TEST

e. Provide smooth or soft toys; avoid loose buttons or toys with eyes that may pull loose

f. Include cereal, egg yolk, a variety of fruits, meat, and vegetables; place infant in highchair for feedings; begin to use a cup for liquids

g. Expect infant to sleep on the average of eleven to thirteen hours per night, and perhaps to be fretful and restless due to discomfort of teething

h. Provide jump chair or walker, noisy rattles, or squeak toys

i. Give chopped and mashed table foods; encourage infant to feed self finger foods

j. Provide for a quiet time before bedtime; may hear infant cry out in sleep, but he or she will not awaken

k. Supervise activities as infant is curious and mobile; move any harmful substances out of reach

l. Expect decreased interest in food as infant increases activity and interest in environment

10. Evaluated to the satisfaction of the instructor

11. Evaluated to the satisfaction of the instructor

GROWTH AND DEVELOPMENT OF THE TODDLER
UNIT II

UNIT OBJECTIVE

After completing this unit, the student should be able to assess the social development of selected toddlers. This knowledge will be shown by completing the assignment sheet and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with the growth and development of the toddler to their correct definitions.
2. Select from a list general characteristics of the toddler.
3. Describe Erikson's developmental stage of "autonomy versus shame and doubt."
4. State facts related to toddlers' psychological development.
5. Select from a list characteristics of toddlers' mobility.
6. Describe toddlers' socialization process.
7. Distinguish among characteristics of physical development of the eighteen-month-old, two-year-old, and two-and-one-half-year-old child.
8. Describe physical care and care guidance for the eighteen-month-old, two-year-old, and two-and-one-half-year-old child.
9. State methods of toilet training.
10. Describe dietary needs of toddlers.
11. State purposes of play.
12. State helpful hints in guiding play.
13. Describe prevention of common accidents involving toddlers.
14. Assess social development of selected toddlers.

GROWTH AND DEVELOPMENT OF THE TODDLER
UNIT II

SUGGESTED ACTIVITIES

I. Suggested activities

  A. Order materials planned to supplement unit.

    1. Filmstrips

      a. *Child Development: Implications for Nursing Care.*

      b. *Toilet Training.*

      (NOTE: The above filmstrips are available through Trainex Corporation, P.O. Box 116, Garden Grove, California 92642.)

      c. *Human Development: 2 1/2 to 6 Years.*--Available from Concept Media, P.O. Box 19542, Irvine, California 92714.

    2. Films

      a. *Parenting: Growing with Children.* Color, 22 minutes, Film Fair Communications, 1976. Available from Film Fair Communications, 10900 Ventura Boulevard, Box 1728, Studio City, California 91604.

      b. *Epidemic.* Color, 27 minutes, MTI Teleprograms, Inc., 1982. Available from MTI Teleprograms, Inc., 3710 Commercial Avenue, Northbrook, Illinois 60062, (312) 291-9400.

      (NOTE: These films are available on a free-loan basis to Oklahoma teachers only. Oklahoma teachers may order films from the Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1500 West Seventh Avenue, Stillwater, Oklahoma 74074. Out-of-state teachers must order from the addresses accompanying the films.)

  B. Provide students with objective sheet.

  C. Provide students with information and assignment sheets.

  D. Discuss unit and specific objectives.

  E. Discuss information and assignment sheets.

  F. Provide opportunity for a field trip to a day care center so that students may assess growth and development patterns of selected toddlers.

  G. Contact Poison Control Center for packet of information concerning first aid in poisoning. Write to Children's Memorial Hospital, P.O. Box 26307, Oklahoma City, Oklahoma 73126, or call (405) 271-5454.

  H. Develop appropriate learning activities for special needs students.

SUGGESTED ACTIVITIES

- I. Obtain toys appropriate for toddler, and have class discuss why such toys are appropriate for this age group.
- J. Give test.
- K. Reteach if necessary.

II. Instructional materials

- A. Objective sheet
- B. Suggested activities
- C. Information sheet
- D. Assignment Sheet #1--Assess Social Development of Selected Toddlers
- E. Answers to assignment sheet
- F. Test
- G. Answers to test

III. Unit references

- A. Marlow, Dorothy. *Textbook of Pediatric Nursing,* 5th ed. Philadelphia: W.B. Saunders Company, 1977.
- B. Pringle, Sheila M., and Brenda E. Ramsey. *Promoting the Health of Children: A Guide for Caretakers and Health Professionals.* St. Louis: The C.V. Mosby Company, 1982.
- C. Whaley, Lucille F., and Donna L. Wong. *Essentials of Pediatric Nursing.* St. Louis: The C.V. Mosby Company, 1982.

GROWTH AND DEVELOPMENT OF THE TODDLER
UNIT II

INFORMATION SHEET

I. Terms and definitions

   A. Autonomy--Quality or state of being self-governing

      (NOTE: A sense of "I" or self-centeredness is developed.)

   B. Lordosis- Anterior convexing of the spine

   C. Maturation--To mature

   D. Mobility--Capable of moving or being moved

   E. Negativism--Tendency to refuse to do, or to do the opposite of what is asked

   F. Parallel play--Playing alongside another child but not with him or her

II. General characteristics of the toddler

   (NOTE: A nurse should be aware of these characteristics when caring for this active age group.)

   A. Develops sense of autonomy or self-determination

   B. Becomes more independent with increasing control of head, hands, and feet

   C. Grows at a slower rate than infant

      (NOTE: Gains four to five pounds per year; has yearly gain in height of five inches until age six.)

   D. Explores curiously

   E. Gains control of body, progressing rapidly from walking to running, jumping, and climbing

   F. Practices new skills and becomes less clumsy

   G. Wants to touch, taste, and smell everything

   H. Rebels against restrictions

   I. Becomes easily frustrated

   J. Displays rapid mood changes

   K. Needs babying at times despite independence

   L. Requires understanding and discipline in learning control of own activity and functions

INFORMATION SHEET

M. May display temper tantrums

N. Has short attention span

O. Exhibits anxiety if separated from significant caregiver

P. Makes a ritual of simple tasks

EXAMPLE: Telling each doll good-night before going to bed

Q. Displays ambivalent feelings

III. Erikson's developmental stage of "autonomy versus shame and doubt"

(NOTE: Some developmentalists refer to this stage as "independence vs dependence." This stage of growth centers around the problem of autonomy and the holding on and letting go of sphincter muscles.)

A. Children of this age group want to control their bodies, themselves, and their environment

B. Children want to use their powers to do for themselves, especially in new motor skills of walking, climbing, and manipulating

C. Children want to be able to use their own mental powers in making selections and decisions

D. Negative feelings of doubt and shame arise when children are made to feel small and self-conscious and when their choices are disastrous

E. Favorable outcome for this stage is self-control and willpower

IV. Facts related to toddlers' psychological development

(NOTE: Toddlers still need to depend on others for physical, emotional, and social needs, but they are trying to initiate self-assertiveness, and they should enter a basic level of independence.)

A. Toddlers need the opportunity to make choices but only those choices that a two- and three-year-old can handle

(NOTE: Do not offer choice if there is no choice. The toddler will become frustrated and confused.)

B. Two-year-olds are curious and will perform thorough, although gross, investigation of objects, whereas three-year-olds use a more reflective technique

C. Toddlers will temporarily regress developmentally to infantile behaviors when they are tired, upset, ill, or hospitalized

INFORMATION SHEET

D. Toddlers have wills of their own and are self-centered individuals who are beginning to assert themselves

(NOTE: This stage is sometimes viewed as the "Terrible Twos." Toddlers have new worlds to explore, new abilities to develop, and limitless energy. They are trying their wings.)

E. Two-and-one-half- to three-and-one-half-year-olds are busy refining skills

(NOTE: This period may be referred to as the "Trusting Threes" and gives the toddler and the caregiver a chance to catch up with all the changes and establish new bonds of closeness.)

F. Toddlers have not learned the concept of sharing, although they are aware that others have possessions toddlers frequently desire and claim; the caregiver's consistent firmness assists toddlers in learning the perimeters of "mine," yours," and sharing

G. Toddlers judge themselves by the reactions of their parental figures

(NOTE: Parental figures may be a grandmother, foster parent, or other significant caregiver.)

V. Characteristics of toddlers' mobility (Assignment Sheet #1)

(NOTE: Muscle development continues from head to toe, with greater agility evident in the use of large and fine muscles.)

A. Two-year-olds are able to stand erect, and they have good use of thoracic and shoulder muscles; the condition of lordosis with a protruding abdomen exists due to underdeveloped muscles of the abdomen and lower back

(NOTE: This condition affects the two-year-old's sense of balance and will be compensated by the toddler standing with feet wide apart to provide a broad base of support. You may need to reassure mothers that this is normal posture and that it will change.)

B. Toddlers walk, run, climb, and jump with boundless energy

(NOTE: This is a frustrating time for caregivers as they try to keep up with the child.)

C. Two-year-olds are able to manipulate small objects

D. Three-year-olds' postures are more erect than two-year-olds' and are much like that of the adult; children of three years of age are able to stand briefly on one foot, hop using both feet, and walk up or down stairs on alternating feet

E. Toddlers often attempt motor skills beyond their level of ability, many times causing accidents

INFORMATION SHEET

VI. Toddlers' socialization process

(NOTE: Toddlers need to perfect social skills even when ill. Provide opportunities for child to socialize.)

A. Social awareness

1. Children from one to three years old become more aware of others and become involved in social interaction

2. Toddlers learn to adapt to the different social expectations of caregivers and significant others

3. Toddlers enjoy opportunities to be with other children and experience parallel play

4. Children from one to three years old will learn social behavior if consistently exposed to the desired behavior

   (NOTE: Caregivers are the primary role models for the child. Social behavior, such as using the correct eating utensils, is mimicked by the toddler.)

B. Exploration

(NOTE: The limitless energy of children between one and three years of age requires much patience on the part of the caregiver.)

1. The investigative curiousity of two- and three-year-olds keeps them in constant motion as they increase their manipulative skills and mobility

2. Toddlers need the opportunity to explore and investigate within safe limits

C. Vocalization

1. Vocabulary increases at a very rapid rate from one to three years of age; word usage and sentence structure will fluctuate for each child

   (NOTE: At eighteen months, the child usually knows ten words; by three years the child has a speaking vocabulary of 900 words.)

2. The child who is exposed to many people and things, such as radio, television, records, and books, will have a broader scale of language development

3. One- or two-syllable words are learned in early toddler period to communicate needs

4. Child may mimic words although he or she may not fully understand meanings

5. Crying will still be a tool of communication and will be expressed when toddler is angry, fearful, uncertain, in pain, or fatigued

INFORMATION SHEET

D. Relationships

(NOTE: In the infant stage, relationships were developed and built on trust. Now the relationships evolve from curiosity.)

1. Toddlers now initiate relationships with people other than caregivers
2. Toddlers will indicate their preference for the individuals that they desire to be with
3. Toddlers are able to relate to pets, inanimate objects, and, many times, imaginary playmates

   (NOTE: Toddlers treat everything as unfeeling objects. Careful supervision is needed for toddlers with pets or other children.)

4. Toddlers become attached to favorite objects and when separated from these objects become very upset
5. Toddlers live in the present and have no sense of past, future, or truth

VII. Characteristics of physical development of the eighteen-month-old, two-year-old, and two-and-one-half-year-old child

A. Eighteen-month-old

1. Has protruding abdomen
2. Anterior fontanels close completely
3. Climbs on stairs and furniture
4. Pulls wheeled toys while walking
5. Seats self on child-sized chair, climbs into large chair
6. Holds own cup to drink

B. Two-year-old

1. Weighs from twenty-five to thirty pounds
2. Measures thirty-two to thirty-four inches in height
3. Has fourteen to sixteen teeth
4. Talks in short sentences
5. May dance to music or rhythm
6. Imitates actions of others
7. Is able to throw a ball

INFORMATION SHEET

C. Two-and-a-half-year-old

1. Has twenty deciduous teeth

2. Has more purposeful motor activity and develops better coordination

3. Follows simple instructions for such activities as washing and drying hands

VIII. Physical care and care guidance for the eighteen-month-old, two-year-old, and two-and-one-half-year-old child

A. Eighteen-month-old child

1. Physical care

a. Be aware that toddler may remain awake awhile after being put to bed

b. Realize that appetite will decrease as physical activity increases

c. Provide finger foods to allow child independence, but give a spoon part of the time to allow child to learn to feed self

d. Obtain needed immunizations for this age group

EXAMPLES: DPT booster, Trivalent OPV, Rubella vaccine

2. Care guidance

a. Show approval and praise child for achievements, but do not show disapproval when child regresses

b. Allow child time to explore and become acquainted with any new setting

c. Offer a substitute for any forbidden objects

EXAMPLE: Instead of insisting that the child cannot have the sharp scissors, offer a shiny metal cover from a jar.

d. Provide social contact with adults other than parents

e. Avoid punishing child for messiness or overreactions to strange persons or situations

f. Provide for learning through individual and group play activities

INFORMATION SHEET

   g. Select simple toys without sharp corners or small, easily removed pieces

   h. Begin toilet training when child is ready

B. Two-year-old child

1. Physical care

   a. Observe safety precautions

      (NOTE: At this stage, toddler begins to climb out of crib.)

   b. Provide naps once or twice per day

   c. Allow toddler more experience at feeding self

   d. Observe for expressions of food likes and dislikes

2. Care guidance

   a. Provide guidelines for behavior

   b. Provide for outdoor play in fenced area or under supervision

   c. Use correct grammar and pronunciation in speaking to child

   d. Give child needed attention by recognizing achievements and desirable behavior

   e. Provide for independence, yet supervise activity to prevent injuries or accidents

   f. Observe for signs of readiness to learn bowel and bladder control

      (NOTE: Avoid forcing toilet training before child is ready. Instead, permit child to observe other family members and to imitate their behavior.)

   g. Praise achievements but do not punish failures

   h. Dress child in easily removable clothing

   i. Respect child's right for own belongings by not expecting or forcing him or her to share toys with other children

   j. Have regular bedtime schedule and stick to it

      (NOTE: Toddler will postpone bedtime as long as possible.)

INFORMATION SHEET

C. Two-and-one-half-year-old child

  1. Physical care

    a. Permit child to select foods as long as diet is well-balanced

    b. Serve small servings and between-meal snacks

    c. Establish definite times for naps and bedtime

  2. Care guidance

    a. Help child to establish self-control and to find socially acceptable outlets for behavior

    b. Expect fluctuation of emotions and behavior

    c. Provide firm, consistent discipline

    (NOTE: Assume a positive attitude concerning behavior as much as possible. Avoid threatening punishment for misbehavior.)

    d. Make instructions simple enough for child to understand

    e. Provide clothing loose enough to give freedom of movement, and encourage child to dress self

IX. Methods of toilet training

(NOTE: Toilet training is begun when a child is ready, usually at the age of fifteen or eighteen months or older. There is no set, ideal age for training.)

A. Use a chair on which the child can sit comfortably with feet on floor

(NOTE: A fixture which attaches to the adult seat may be used, but many children do better with a child-sized chair.)

B. Leave child on chair for only a short time at first

C. Do not expect perfect results

(NOTE: The child may void or defecate after leaving the chair. This is not done deliberately, and the child should not be punished.)

D. Avoid overreacting to lapses of control; treat each child individually

(NOTE: Lapse of control may be due to diarrhea, ignoring the indication to defecate, or an attempt to show anger or frustration.)

E. Expect bladder training to begin when child stays dry for as long as two hours at a time

(NOTE Daytime control of the bladder is achieved earlier than nighttime control.)

INFORMATION SHEET

F. Watch child for signs of readiness to begin bladder control

EXAMPLES: Begins to connect wet pants or the puddle on the floor with something he or she did. Indicates the need to urinate after it happens.

G. Do not punish child for periods of regression that may be caused by change of surroundings, illness, or stress of any kind

X. Dietary needs of toddlers

A. Dietary patterns

1. The toddler now has adapted a diet pattern similar to an adult's: three meals a day plus snacks

2. The quantity of food consumed by a toddler at any one meal or on any particular day will vary

(NOTE: Toddlers will usually select quantities sufficient for their energy needs, provided they are not overfilled by snack foods and liquids prior to mealtimes.)

B. Daily caloric requirements for toddlers--1300 to 1400 calories

C. Diet

1. Toddler's daily diet should consist of a representation from each of the four basic food groups

2. Quality of food eaten by toddler is much more important than quantity now that appetite is decreased and mobility is increased

3. Minerals, vitamins, and protein requirements are very important at this time because the body is developing muscle tissue and is strengthening bones

(NOTE: Between-meal snacks recommended for toddlers would include crackers, dry cereals, fruits, and raw vegetables. Using just milk for the provision of all nutrients should be discouraged because milk contains very little iron.)

XI. Purposes of play

A. Exercises muscles

B. Stimulates learning and coordination as child explores and tries new activities

C. Relieves emotional tension

D. Provides way of explaining procedures, treatments, and other situations to a hospitalized child

EXAMPLE: The nurse can use a doll or stuffed toy to show the child how treatment will be done.

INFORMATION SHEET

E. Refines both gross and fine motor skills

F. Ventilates feelings and helps child learn measures of self-control

G. Helps child develop socially and learn to get along with others

EXAMPLES: Learning how to lead, follow, cooperate, and compromise

XII. Helpful hints in guiding play

A. Provide toys suitable for child's age, size, and ability

(NOTE: Simple toys are best for toddlers. Toys that are too large or difficult to maneuver may cause frustration or injury.)

B. Avoid toys with small, easily removed parts or sharp edges

C. Permit toddler to be possessive with own toys; sharing will come later in development

(NOTE: Parallel play is characteristic.)

D. Protect toddlers from each other in playing; the stronger, more aggresive child may unintentionally injure a smaller, more passive child

E. Provide time for toddlers to play alone and to play with others of their own age

F. Provide opportunities for toddlers to express themselves through a variety of media

EXAMPLES: Playing in the water, playing with clay, playing in sand

G. Provide a place and proper clothing and permit child to get wet or dirty when involved in some types of play activities

H. Divert toddler's attention to other toys and inanimate objects if child begins to inflict injury on another child

XIII. Prevention of common accidents involving toddlers

(NOTE: Accidents are the major causes of death in childhood.)

A. Automobile accidents

1. Do not permit child to play in or near parked cars or in the street or driveway
2. Hold toddler's hand when crossing streets
3. Do not leave small child unattended in a car
4. Use seatbelt or approved car seat for child, and lock car doors

INFORMATION SHEET

5. Supervise child constantly when child is playing in an unfenced area
6. Begin teaching safety early

B. Burns

1. Teach child the meaning of *hot*
2. Keep matches and lighters out of child's reach
3. Turn handles of cooking utensils to inside area of stove
4. Remain with child while he or she is in bathtub
5. Place hot beverage containers out of child's reach
6. Protect child from electrical contacts

   (CAUTION: Cover all electrical outlets and keep cords from child.)

7. Screen fireplace and protect child from other heating equipment
8. Consider safety factors when selecting home appliances
9. Make sure that clothing is fire resistant

C. Falls

1. Teach child how to go up and down stairs when he or she shows a readiness
2. Fasten crib sides securely

   (CAUTION: Never turn your back on child in crib with side rails down.)

3. Block stairways with a door or gate closed tightly
4. Avoid slippery floors by mopping up any spills and by using non-slippery floor coverings
5. Safeguard against falls by eliminating opportunities
6. Keep sharp objects out of child's reach
7. Screen open windows
8. Do not allow child to climb on furniture or high places

D. Suffocation and choking

1. Avoid small objects which can be aspirated or pushed into body openings

   EXAMPLES: Popcorn, peanuts, small candies, parts of toys

INFORMATION SHEET

2. Avoid toys with small, easily removed parts
3. Do not permit small child to play with balloons
4. Keep plastic bags or thin plastic coverings away from child
5. Avoid clothes with drawstrings or ties
6. Do not try to give medicine or liquids to a crying child as it may be aspirated
7. Keep child away from drapery cords

   (NOTE: If crib is near such cords, child may become entangled in them.)

8. Turn child to one side or elevate hips slightly when child is vomiting

   (CAUTION: Do not try to pick up child while he or she is vomiting.)

9. Avoid hanging toys on crib sides

E. Poisoning

1. Store detergents and cleaning supplies out of child's reach

   (NOTE: Dishwasher detergents, laundry detergents, and petroleum-based furniture polishes are the household chemicals which cause the greatest number of injuries to small children.)

2. Keep all medications out of child's reach, and never refer to medicine as candy
3. Never use medication from an unlabeled bottle
4. Use only approved paints on child's furnishings and toys
5. Wash fruits and vegetables thoroughly before giving to child to eat
6. Know first-aid measures to take, and have number of poison control center on or near phone

   (NOTE: In Oklahoma, call Children's Memorial Hospital [405] 271-5454.)

7. If child ingests poison, take to nearest hospital, with container of poison and any vomitus that must be analyzed

F. Drowning

1. Supervise child any time he or she is near or in water, either a tub or wading pool

INFORMATION SHEET

2. Empty pool or tub after each use
3. Cover wells or cesspools securely
4. Know techniques for resuscitation of drowning victims

GROWTH AND DEVELOPMENT OF THE TODDLER
UNIT II

ASSIGNMENT SHEET #1--ASSESS SOCIAL DEVELOPMENT OF SELECTED TODDLERS

NAME ______________________ SCORE ____________

Predicted growth and development patterns have been identified for each age group. Each toddler has his or her own distinct pattern of growth and may not follow exactly the steps outlined in this unit. A toddler may be ahead of schedule in some areas and behind in others yet still be a healthy, well-adjusted child.

In this unit, you have been given specific developmental tasks for social growth for toddlers from ages one-and-one-half to three years. To complete this assignment sheet, you will need to select two children of the same age and assess their growth compared to the "norms" given in this unit. Maturation and growth will depend on the atmosphere of each child's environment. It would be interesting to assess family background and to try to relate growth patterns to environment. After you assess each child's development, interview the parent or parents and obtain information as indicated on the following sheets. Discuss your findings in class for evaluation.

ASSIGNMENT SHEET #1

CHILD #1 Name or initials ____________ Age __________
Parents' Occupations

Mother ____________________ Father ________________

Number of siblings _____ Ages _____, _____, _____, _____

Family's interests, hobbies, etc.

____

____

____

Parents' general philosophy of child rearing

____

____

____

____

____

SOCIAL DEVELOPMENT FOR THIS AGE GROUP

CHILD #1 DEVELOPMENT OBSERVED

CHILD #2 Name or initials ____________ Age __________
Parents' Occupations

Mother ____________________ Father ________________

Number of siblings _____ Ages _____, _____, _____, _____

Family's interests, hobbies, etc.

____

____

____

Parents' general philosophy of child rearing

____

____

____

____

____

SOCIAL DEVELOPMENT FOR THIS AGE GROUP

CHILD #2 DEVELOPMENT OBSERVED

ASSIGNMENT SHEET #1

SOCIAL DEVELOPMENT FOR THIS AGE GROUP	CHILD #1 OBSERVED DEVELOPMENT	SOCIAL DEVELOPMENT FOR THIS AGE GROUP	CHILD #2 OBSERVED DEVELOPMENT

GROWTH AND DEVELOPMENT OF THE TODDLER
UNIT II

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

GROWTH AND DEVELOPMENT OF THE TODDLER
UNIT II

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with the growth and development of the toddler to their correct definitions. Write the correct numbers in the blanks.

_____a. Quality or state of being self-governing	1. Mobility
_____b. Capable of moving or being moved	2. Autonomy
_____c. Anterior convexing of the spine	3. Maturation
_____d. Tendency to refuse to do, or to do the opposite of what is asked	4. Negativism
_____e. Playing alongside another child but not with him or her	5. Lordosis
_____f. To mature	6. Parallel play

2. Select from the following list general characteristics of the toddler. Write an "X" in the blank before each correct answer.

_____a. Shares toys easily

_____b. Develops sense of autonomy or self-determination

_____c. Becomes more independent with increasing control of head, hands, and feet

_____d. Has developed regular sleep pattern

_____e. Grows at a slower rate than infant

_____f. Has a long attention span

_____g. Explores curiously

_____h. Gains control of body, progressing rapidly from walking to running, jumping, and climbing

_____i. Is able to walk up and down stairs independently

_____j. Knows right from wrong; develops conscience

_____k. Practices new skills and becomes less clumsy

_____l. Wants to touch, taste, and smell everything

_____m. Rebels against restrictions

_____n. Grows rapidly

TEST

______o. Becomes easily frustrated

______p. Displays rapid mood changes

______q. Refines fine motor skills

______r. Is able to play independently

______s. Needs babying at times despite independence

______t. Requires understanding and discipline in learning control of own activity and functions

______u. Displays ambivalent feelings

______v. Exhibits anxiety if separated from significant caregiver

______w. May display temper tantrums

______x. Makes easy adjustment when separated from significant caregiver

______y. Makes a ritual of simple tasks

3. Describe Erikson's developmental stage of "autonomy versus shame and doubt."

____

____

____

____

____

____

____

____

____

4. State facts related to toddlers' psychological development.

a. ______________________________

____

____

b. ______________________________

____

____

TEST

c. ______________________________

____

____

d. ______________________________

____

____

e. ______________________________

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f. ______________________________

____

____

g. ______________________________

____

____

5. Select from the following list characteristics of toddlers' mobility. Write an "X" in the blank before each correct answer.

_____a. Two-year-olds are able to stand erect, and they have good use of thoracic and shoulder muscles; the condition of lordosis with a protruding abdomen exists due to underdeveloped muscles of the abdomen and lower back

_____b. Two-year-olds are able to fold a piece of paper diagonally

_____c. Toddlers are able to learn to tie shoelaces

_____d. Toddlers walk, run, climb, and jump with boundless energy

_____e. Two-year-olds are able to manipulate small objects

_____f. Toddlers are able to play and jump rope

_____g. Three-year-olds' postures are more erect than two-year-olds' and are much like that of the adult; children three years of age are able to stand briefly on one foot, hop using both feet, and walk up or down stairs on alternating feet

_____h. Two-year-olds are able to learn to ride a tricycle

_____i. Toddlers often attempt motor skills beyond their level of ability, many times causing accidents

TEST

6. Describe toddlers' socialization process.

   a. Social awareness

   b. Exploration

   c. Vocalization

TEST

d. Relationships

7. Distinguish among characteristics of physical development of the eighteen-month-old, two-year-old, and two-and-one-half-year-old child. Write an "18," "2," or "2 1/2" in the correct blanks.

_____a. Holds own cup to drink

_____b. Has twenty decidous teeth

_____c. Climbs on stairs and furniture

_____d. Talks in short sentences

_____e. Follows simple instructions for such activities as washing and drying hands

_____f. Has fourteen to sixteen teeth

_____g. Has more purposeful motor activity and develops better coordination

_____h. Is able to throw a ball

_____i. Has protruding abdomen

_____j. Imitates actions of others

_____k. Pulls wheeled toys while walking

_____l. Anterior fontanels close completely

_____m. Measures thirty-two to thirty-four inches in height

_____n. Seats self on child-sized chair, climbs into large chair

_____o. Weighs from twenty-five to thirty pounds

_____p. May dance to music or rhythm

TEST

8. Describe physical care and care guidance for the eighteen-month-old, two-year-old, and two-and-one-half-year-old child.

   a. Eighteen-month-old child

      1) Physical care--____________________

      2) Care guidance--____________________

   b. Two-year-old child

      1) Physical care--____________________

TEST

2) Care guidance--

c. Two-and-one-half-year-old child

1) Physical care--

2) Care guidance--

TEST

9. State methods of toilet training.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

e. ______________________________

f. ______________________________

g. ______________________________

10. Describe dietary needs of toddlers.

a. Dietary patterns--______________________________

TEST

b. Daily caloric requirement for toddlers-- ______________________________

c. Diet-- ______________________________

11. State purposes of play.

a. ______________________________

b. ______________________________

c. ______________________________

d. ______________________________

TEST

e. ______________________________

____

f. ______________________________

____

g. ______________________________

____

12. State helpful hints in guiding play.

a. ______________________________

____

____

b. ______________________________

____

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c. ______________________________

____

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d. ______________________________

____

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e. ______________________________

____

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f. ______________________________

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TEST

13. Describe prevention of common accidents involving toddlers.

a. Automobile accidents--

b. Burns--

c. Falls--

TEST

d. Suffocation and choking--

e. Poisoning--

f. Drowning--

TEST

(NOTE: Test question 14 lists the assignment sheet. It is an important part of this test. If it has not been completed, check with your instructor.)

14. Assess social development of selected toddlers.

GROWTH AND DEVELOPMENT OF THE TODDLER
UNIT II

ANSWERS TO TEST

1. a. 2
   b. 1
   c. 5
   d. 4
   e. 6
   f. 3

2. b, c, e, g, h, k, l, m, o, p, s, t, u, v, w, y

3. Description should include the following
   a. Children of this age group want to control their bodies, themselves, and their environment
   b. Children want to use their powers to do for themselves, especially in new motor skills of walking, climbing, and manipulating
   c. Children want to be able to use their own mental powers in making selections and decisions
   d. Negative feelings of doubt and shame arise when children are made to feel small and self-conscious and when their choices are disastrous
   e. Favorable outcome for this stage is self-control and willpower

4. a. Toddlers need the opportunity to make choices but only those choices that a two- and three-year-old can handle
   b. Two-year-olds are curious and will perform thorough, although gross, investigation of objects, whereas three-year-olds use a more reflective technique
   c. Toddlers will temporarily regress developmentally to infantile behaviors when they are tired, upset, ill, or hospitalized
   d. Toddlers have wills of their own and are self-centered individuals who are beginning to assert themselves
   e. Two-and-one-half- to three-and-one-half-year-olds are busy refining skills

ANSWERS TO TEST

f. Toddlers have not learned the concept of sharing, although they are aware that others have possessions toddlers frequently desire and claim; the caregiver's consistent firmness assists toddlers in learning the perimeters of "mine," "yours," and sharing

g. Toddlers judge themselves by the reactions of their parental figures

5. a, d, e, g, i

6. Descriptions should include the following

a. Social awareness

1) Children from one to three years old become more aware of others and become involved in social interaction

2) Toddlers learn to adapt to the different social expectations of caregivers and significant others

3) Toddlers enjoy opportunities to be with other children and experience parallel play

4) Children from one to three years old will learn social behavior if consistently exposed to the desired behavior

b. Exploration

1) The investigative curiosity of two- and three-year-olds keeps them in constant motion as they increase their manipulative skills and mobility

2) Toddlers need the opportunity to explore and investigate within safe limits

c. Vocalization

1) Vocabulary increases at a very rapid rate from one to three years of age; word usage and sentence structure will fluctuate for each child

2) The child who is exposed to many people and things, such as radio, television, records, and books, will have a broader scale of language development

3) One- or two-syllable words are learned in early toddler period to communicate needs

4) Child may mimic words although he or she may not fully understand meanings

5) Crying will still be a tool of communication and will be expressed when toddler is angry, fearful, uncertain, in pain, or fatigued

ANSWERS TO TEST

d. Relationships

1) Toddlers now initiate relationships with people other than caregivers

2) Toddlers will indicate their preference for the individuals that they desire to be with

3) Toddlers are able to relate to pets, inanimate objects, and, many times, imaginary playmates

4) Toddlers become attached to favorite objects and when separated from these objects become very upset

5) Toddlers live in the present and have no sense of past, future, or truth

7. a. 18
b. 2 1/2
c. 18
d. 2
e. 2 1/2
f. 2
g. 2 1/2
h. 2
i. 18
j. 2
k. 18
l. 18
m. 2
n. 18
o. 2
p. 2

8. Descriptions should include the following

a. Eighteen-month-old child

1) Physical care

a) Be aware that toddler may remain awake awhile after being put to bed

b) Realize that appetite will decrease as physical activity increases

c) Provide finger foods to allow child independence, but give a spoon part of the time to allow child to learn to feed self

d) Obtain needed immunizations for this age group

2) Care guidance

a) Show approval and praise child for achievements, but do not show disapproval when child regresses

b) Allow child time to explore and become acquainted with any new setting

ANSWERS TO TEST

- c) Offer a substitute for any forbidden objects
- d) Provide social contact with adults other than parents
- e) Avoid punishing child for messiness or overreactions to strange persons or situations
- f) Provide for learning through individual and group play activities
- g) Select simple toys without sharp corners or small, easily removed pieces
- h) Begin toilet training when child is ready

b. Two-year-old child

- 1) Physical care
  - a) Observe safety precautions
  - b) Provide naps once or twice per day
  - c) Allow toddler more experience at feeding self
  - d) Observe for expressions of food likes and dislikes
- 2) Care guidance
  - a) Provide guidelines for behavior
  - b) Provide for outdoor play in fenced area or under supervision
  - c) Use correct grammar and pronunciation in speaking to child
  - d) Give child needed attention by recognizing achievements and desirable behavior
  - e) Provide for independence, yet supervise activity to prevent injuries or accidents
  - f) Observe for signs of readiness to learn bowel and bladder control
  - g) Praise achievements but do not punish failures
  - h) Dress child in easily removable clothing
  - i) Respect child's right for own belongings by not expecting or forcing him or her to share toys with other children
  - j) Have regular bedtime schedule and stick to it

ANSWERS TO TEST

c. Two-and-one-half-year-old child

  1) Physical care

    a) Permit child to select foods as long as diet is well-balanced

    b) Serve small servings and between-meal snacks

    c) Establish definite times for naps and bedtime

  2) Care guidance

    a) Help child to establish self-control and to find socially acceptable outlets for behavior

    b) Expect fluctuations of emotions and behavior

    c) Provide firm, consistent discipline

    d) Make instructions simple enough for child to understand

    e) Provide clothing loose enough to give freedom of movement, and encourage child to dress self

9. a. Use a chair on which the child can sit comfortably with feet on floor

   b. Leave child on chair for only a short time at first

   c. Do not expect perfect results

   d. Avoid overreacting to lapses of control; treat each child individually

   e. Expect bladder training to begin when child stays dry for as long as two hours at a time

   f. Watch child for signs of readiness to begin bladder control

   g. Do not punish child for periods of regression that may be caused by change of surroundings, illness, or stress of any kind

10. Descriptions should include the following

   a. Dietary patterns

     1) The toddler now has adapted a diet pattern similar to an adult's: three meals a day plus snacks

     2) The quantity of food consumed by a toddler at any one meal or on any particular day will vary

   b. Daily caloric requirements for toddlers--1300 to 1400 calories

ANSWERS TO TEST

c. Diet

  1) Toddler's daily diet should consist of a representation from each of the four basic food groups

  2) Quality of food eaten by toddler is much more important than quantity now that appetite is decreased and mobility is increased

  3) Minerals, vitamins, and protein requirements are very important at this time because the body is developing muscle tissue and is strengthening bones

11. a. Exercises muscles

  b. Stimulates learning and coordination as child explores and tries new activities

  c. Relieves emotional tension

  d. Provides way of explaining procedures, treatments, and other situations to a hospitalized child

  e. Refines both gross and fine motor skills

  f. Ventilates feelings and helps child learn measures of self-control

  g. Helps child develop socially and learn to get along with others

12. a. Provide toys suitable for child's age, size, and ability

  b. Avoid toys with small, easily removed parts or sharp edges

  c. Permit toddler to be possessive with own toys; sharing will come later in development

  d. Protect toddlers from each other in playing; the stronger, more aggressive child may unintentionally injure a smaller, more passive child

  e. Provide time for toddlers to play alone and to play with others of their own age

  f. Provide opportunities for toddlers to express themselves through a variety of media

  g. Provide a place and proper clothing and permit child to get wet or dirty when involved in some types of play activities

  h. Divert toddler's attention to other toys and inanimate objects if child begins to inflict injury on another child

ANSWERS TO TEST

13. Descriptions should include the following
    a. Automobile accidents
        1) Do not permit child to play in or near parked cars or in the street or driveway
        2) Hold the toddler's hand when crossing streets
        3) Do not leave small child unattended in a car
        4) Use seatbelt or approved car seat for child, and lock car doors
        5) Supervise child constantly when child is playing in an unfenced area
        6) Begin teaching safety early
    b. Burns
        1) Teach child the meaning of *hot*
        2) Keep matches and lighters out of child's reach
        3) Turn handles of cooking utensils to inside area of stove
        4) Remain with child while he or she is in bathtub
        5) Place hot beverage containers out of child's reach
        6) Protect child from electrical contacts
        7) Screen fireplace and protect child from other heating equipment
        8) Consider safety factors when selecting home appliances
        9) Make sure that clothing is fire resistant
    c. Falls
        1) Teach child how to go up and down stairs when he or she shows a readiness
        2) Fasten crib sides securely
        3) Block stairways with a door or gate closed tightly
        4) Avoid slippery floors by mopping up any spills and by using nonslippery floor coverings
        5) Safeguard against falls by eliminating opportunities
        6) Keep sharp objects out of child's reach
        7) Screen open windows
        8) Do not allow child to climb on furniture or high places

ANSWERS TO TEST

d. Suffocation and choking

   1) Avoid small objects which can be aspirated or pushed into body openings

   2) Avoid toys with small, easily removed parts

   3) Do not permit small child to play with balloons

   4) Keep plastic bags or thin plastic covering away from child

   5) Avoid clothes with drawstrings or ties

   6) Do not try to give medicine or liquids to a crying child as it may be aspirated

   7) Keep child away from drapery cords

   8) Turn child to one side or elevate hips slightly when child is vomiting

   9) Avoid hanging toys on crib sides

e. Poisoning

   1) Store detergents and cleaning supplies out of child's reach

   2) Keep all medications out of child's reach, and never refer to medicine as candy

   3) Never use medication from an unlabeled bottle

   4) Use only approved paints on child's furnishings and toys

   5) Wash fruits and vegetables thoroughly before giving to child to eat

   6) Know first-aid measures to take, and have number of poison control center on or near phone

   7) If child ingests poison, take to nearest hospital, with container of poison and any vomitus that must be analyzed

f. Drowning

   1) Supervise child any time he or she is near or in water, either a tub or or wading pool

   2) Empty pool or tub after each use

   3) Cover wells or cesspools securely

   4) Know techniques for resuscitation of drowning victims

14. Evaluated to the satisfaction of the instructor

GROWTH AND DEVELOPMENT OF THE PRESCHOOL CHILD
UNIT III

UNIT OBJECTIVE

After completing this unit, the student should be able to assess the preschool child, using the interview technique. This knowledge will be shown by completing the assignment sheet, job sheet, and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with growth and development of the preschool child to their correct definitions.
2. Describe Erikson's developmental stage of "initiative versus guilt."
3. Select from a list characteristics of the preschool child.
4. Describe general biological growth and development of the preschool child.
5. State psychological expectations for the preschool child.
6. State ways in which preschool children can be assisted in social awareness and development of relationships.
7. Describe language and learning development of the preschool child.
8. State behaviors of the three-, four-, and five-year-old age groups.
9. Select from a list ways to guide and discipline the preschool child.
10. Interview a preschool child.
11. Demonstrate the ability to make a feely box.

GROWTH AND DEVELOPMENT OF THE PRESCHOOL CHILD
UNIT III

SUGGESTED ACTIVITIES

I. Suggested activities

   A. Order materials planned to supplement unit--filmstrips.

      1. *Child Development: Implications for Nursing Care.* Available through the Trainex Corporation, P.O. Box 116, Garden Grove, California 92642

      2. *Human Development: 2 1/2 to 6 Years.* Available from Concept Media, P.O. Box 19542, Irvine, California 92714.

   B. Provide students with objective sheet.

   C. Provide students with information, assignment, and job sheets.

   D. Discuss unit and specific objectives.

   E. Discuss information and assignment sheets.

   F. Reinforce the importance of the basic knowledge of normal growth and development and its relationship to caring for the child with an illness.

   G. Demonstrate and discuss procedures outlined in job sheet.

   H. Provide equipment to complete Job Sheet #1.

   I. Take a field trip to a local day-care center, nursery school, or preschool program to observe preschool children.

   J. Develop appropriate learning activities for special needs students.

   K. Obtain from your local county health department information that may deal with preparing preschoolers for school, health needs, and concerns.

   L. Give test.

   M. Reteach if necessary.

II. Instructional materials

   A. Objective sheet

   B. Suggested activities

   C. Information sheet

   D. Assignment Sheet #1--Interview a Preschool Child

SUGGESTED ACTIVITIES

E. Answers to assignment sheet

F. Job Sheet #1--Make a Feely Box

G. Test

H. Answers to test

III. Unit references

A. Marlow, Dorothy. *Textbook of Pediatric Nursing,* 5th ed. Philadelphia: W.B. Saunders Company, 1977.

B. Pringle, Sheila, and Brenda E. Ramsey. *Promoting the Health of Children: A Guide for Caretakers and Health Care Professionals.* St. Louis: The C.V. Mosby Company, 1982.

C. Whaley, Lucille F., and Donna L. Wong. *Essentials of Pediatric Nursing.* St. Louis: The C.V. Mosby Company, 1982.

GROWTH AND DEVELOPMENT OF THE PRESCHOOL CHILD
UNIT III

INFORMATION SHEET

I. Terms and definitions

A. Discipline--Process of training and learning

B. Guidance--Providing for discipline and learning experiences to aid in optimum growth and development

C. Encopresis--Fecal incontinence not due to illness or organic defect

D. Internalize--Self-incorporation of guiding principles through learning or socialization processes

E. Enuresis--Urinary incontinence after the age when urethral sphincter control can normally be expected

F. Initiative--Energy or aptitude to begin an action

II. Erikson's developmental stage of "initiative versus guilt"

A. Children are seeking new experiences and are questioning and exploring their own bodies and environments

B. Children are developing both a sense of right and wrong and a conscience

(NOTE: Children of preschool age are beginning to internalize feelings.)

C. Sense of guilt can arise if children are made to feel that imaginings and activities are wrong

D. Children are exploring their environments with all of their new-found motor skills and knowledge; the need for positive guidance and the influence of an understanding caregiver can prove to be a deciding factor in how the child accomplishes tasks at this age

III. Characteristics of the preschool child

(NOTE: The age range of the preschool child is from three to six years.)

A. Develops a sense of initiative

B. Becomes fairly independent

C. Learns to play with others; begins to learn to share belongings

D. Keeps in constant motion and must be monitored to prevent injuries

E. Feels more secure in the world; has adjusted to mother's absence more easily

INFORMATION SHEET

F. Becomes more skilled in motor and coordination tasks

(NOTE: Physical growth is slowed as motor skills are refined.)

G. Tries new language skills, at times inappropriately and loudly

(NOTE: These are the times when preschoolers speak out loudly, clearly, and honestly.)

EXAMPLE: "See the fat old man in the baggy pants."

H. Can sit still for longer periods of time because of increased attention span

I. Imitates adult behavior, especially adult of same sex

J. Uses imaginative play and make-believe stories; cannot distinguish between reality and fantasy

IV. General biological growth and development of the preschool child (Assignment Sheet #1)

A. Weight

1. Average weight gain is from 5 to 6 pounds per year
2. Weight should be between 40 and 45 pounds by the age of five

B. Height

1. Average height gain ranges from 2 to 2 1/2 inches per year
2. Height is about 4 feet in older preschoolers

C. Teeth--Preschool child should have a full set of deciduous teeth

(NOTE: By the end of the preschool stage, it is possible that some children will have lost some of their temporary teeth while others may have their six-year molars.)

D. Trunk and extremities

1. Spinal columm develops normal curvatures; lordosis seen in toddlers should be corrected due to stronger, more-developed muscles
2. Eye-hand coordination is improved
3. Contours of arms and legs are firmer because of strengthening of muscles
4. Muscle control needed for climbing, reaching, and lifting is improved

INFORMATION SHEET

V. Psychological expectations for the preschool child (Assignment Sheet #1)

   A. Becomes independent

   B. May change attachment for the sex role of the caregiver

   (NOTE: Loss of a caregiver at this stage may delay the needed direction by a sex-role model for the future.)

   C. Is eager to please and to be helpful

   D. Develops a basic sense of right and wrong and a conscience

   (NOTE: Impressionable preschoolers are confused when told of adult standards if the adult does not live up to those standards.)

   E. Develops fears of mutilation, body injuries, and other fears

VI. Ways in which preschool children can be assisted in social awareness and development of relationships (Assignment Sheet #1)

   A. Identify roles of jobs and persons who do particular tasks

   EXAMPLES: Fire fighters, nurses, doctors, secretaries, President of U.S.

   B. Help children of this age learn about dangers of getting into cars with strangers, accepting candy or gifts from strangers

   (NOTE: Children of this age should also be taught to be cautious of someone they know if that person approaches them in an odd manner.)

   C. Help them to look at themselves and how they have grown physically and emotionally

   D. Provide opportunities for children to socialize with other children their age and older

   (NOTE: Many children are placed in preschool programs or day-care centers to allow this socialization.)

   E. Allow children to work out relationships with other children when possible

   (NOTE: Take care not to intervene when disagreements break out among children while playing. The problems are usually resolved quickly and play resumes.)

   F. Structure responsibilities of preschoolers and begin laying groundwork of expectations for their behavior

   G. Allow preschoolers to cling to security objects when under stress

   H. Allow children to have pretend friends; it is not necessary to agree that the friend is real, but agree that it is fun to have one

   I. Assist children in working through sibling rivalry

INFORMATION SHEET

VII. Language and learning development of the preschool child

(NOTE: Very often the nurse is the first person to pick up on a learning disability or a speech problem that can be treated.)

A. Language

1. Language is being learned at a very rapid rate

   (NOTE: The five-year-old should have a vocabulary of well over two thousand words.)

2. Undesirable language usually has little significance, as the child does not fully comprehend what he or she has said; disapproval should be expressed, but do not make an issue of it

B. Learning

1. Learning skills are developed by stimulating the child through new experiences and by letting the child think, make mistakes, and comprehend on his or her own

2. Atmosphere for learning is set by enthusiasm of the caregiver to learn and to provide time for activities that stimulate imagination

   (NOTE: Television is a good and a bad example of stimulation for children. Allowing children to watch TV programs that aim to teach language, subject matter, and skills may provide good stimulation; allowing them to watch long periods of cartoons may not.)

3. Preschoolers learn by repetition and must be allowed to work through the frustration of trial and error

4. All questions should be answered simply, honestly, and as promptly as possible

VIII. Behaviors of the three-, four-, and five-year-old age groups (Job Sheet #1)

A. Three-year-old

1. Runs and jumps well

2. Uses eating utensils well

3. Learns to wash hands, brush teeth, and assist with bath

4. Dresses self, but still needs help with buttons and other fasteners

5. Helps with small tasks

6. Can draw a circle and simple pictures

INFORMATION SHEET

B. Four-year-old

1. Is less willing to do as told; initiates activities and is adventurous
2. Has increased self-confidence
3. Adapts more easily to change of routine
4. Can use scissors and draw a circle and a square
5. May have imaginary playmate
6. Begins to experience fears such as fear of injury, the dark, animals, and strangers
7. Becomes aware of sexual differences but may prefer playmates of the same sex
8. Begins to wonder about death and dying
9. Enjoys playing dress up
10. Begins to show off and want own way

C. Five-year-old

1. Becomes ready to join the larger world outside the family
2. Becomes less fearful and more sure of self and ability
3. Learns to print own name and other letters
4. Can play games controlled by rules
5. Has a longer attention span and can complete simple projects

IX. Ways to guide and discipline the preschool child

(NOTE: It is difficult to discipline and be strict with the child who is ill. But the child still must have structure and guidance when confined with an illness. It may be necessary to assist parents in setting up guidelines for an ill child, especially when the illness may be chronic or very confining.)

A. Be consistent

B. Give simple directions and answer questions as simply as possible

C. Offer choices only when a choice is actually available

(NOTE: Do not offer the child a choice of taking or not taking medicine.)

D. Give suggestions and directions in a positive manner; avoid using *no* and *don't*

INFORMATION SHEET

E. Motivate child through attention, approval, and compliments

F. Inform child in advance of expected behavior

G. Encourage child to be independent and to assume responsibility for behavior

H. Become a role model for the child

I. Try to channel destructive or aggressive behavior productively

(NOTE: Destructive behavior may only be curiosity. Offer toys that can be taken apart and put back together easily.)

J. Gradually impose and remove limits or restrictions as child shows ability to take on more responsibilities

GROWTH AND DEVELOPMENT OF THE PRESCHOOL CHILD
UNIT III

ASSIGNMENT SHEET #1--INTERVIEW A PRESCHOOL CHILD

NAME ______________________________ SCORE ____________

The preschool child is in constant motion while learning new motor skills. The child is also developing a very large vocabulary and loves to talk on all subjects. Select a preschool child to interview using the questions in this assignment sheet and develop some ideas of your own on techniques to assess this stage of growth. If possible, spend at least an hour or two with the child. With permission, offer a snack or possibly a toy or game to play with or talk about while you ask questions. Complete your interview questionnaire and hand in to your instructor for evaluation.

TECHNIQUES TO OBTAIN OTHER INFORMATION

Refer back to the Information Sheet in this unit on areas of growth and development. Develop some of your own techniques to assess this child's growth and maturation.

EXAMPLES:	How high can you jump? (Ask them to jump for you.)	Do you dress yourself? (Ask them to button a button.)

Use the feely box in Job Sheet #1 to see if child knows what certain articles are and what they are used for.

Take a snack (with permission) to check fine motor skills in handling and eating foods.

Take paper and crayons for child to draw you a picture. (Either you or the child may choose a subject.)

108-D

ASSIGNMENT SHEET #1

GENERAL INFORMATION

NAME ____________________ NICKNAME? ____________

AGE ________ BROTHERS' NAMES ____________

____

SISTERS' NAMES ________________

____

PETS? NAMES? ________________________________

MOTHER'S OCCUPATION ____________________________

FATHER'S OCCUPATION ____________________________

CHILD'S FAVORITE TV PROGRAM ________________________

CHILD'S FAVORITE CHARACTERS ________________________

WHAT ACTIVITY DOES THE CHILD LIKE TO DO BEST? ______________

OTHER INFORMATION YOU WOULD LIKE TO KNOW ______________

____

____

____

____

____

____

OBJECTIVE DATA

IS CHILD NEAR AVERAGE HEIGHT FOR HER OR HIS AGE? ____________

IS CHILD NEAR AVERAGE WEIGHT FOR HER OR HIS AGE? ____________

DOES CHILD HAVE A FULL SET OF DECIDUOUS TEETH OR HAS HE OR SHE LOST SOME TEETH? ____________________________

DOES CHILD HAVE GOOD HAND-EYE COORDINATION? ____________

IS CHILD'S POSTURE GOOD? ____________________________

GROWTH AND DEVELOPMENT OF THE PRESCHOOL CHILD
UNIT III

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

GROWTH AND DEVELOPMENT OF THE PRESCHOOL CHILD
UNIT III

JOB SHEET #1--MAKE A FEELY BOX

(NOTE: Preschoolers are inquisitive, eager to learn, and quite imaginative. They are becoming more skilled in dexterity and coordination as fine motor skills improve. This box could be taken with you when you interview the preschool child to assess dexterity and knowledge level. The box could even be used as a form of entertainment for the preschool child you care for in the hospital. Just think of all the things you could find to put in a feely box.)

I. Equipment and supplies

A. Oatmeal box

B. Scissors

C. Sock

EXAMPLES: Bobby sock, athletic sock

D. Small objects

EXAMPLES: Spoons, balls, jacks, marbles

II. Procedure

A. Cut toe out of sock

B. Put small items into oatmeal box

C. Put sock over top of oatmeal box

(NOTE: The child should be able to put his or her hand through the sock and into the box, without seeing what is in the box. Have the child tell you what he or she thinks the item is and/or describe it.)

GROWTH AND DEVELOPMENT OF THE PRESCHOOL CHILD
UNIT III

TEST

NAME ________________________________ SCORE __________

1. Match terms associated with growth and development of the preschool child to their correct definitions. Write the correct numbers in the blanks.

_____a. Process of training and learning

_____b. Providing for discipline and learning experiences to aid in optimum growth and development

_____c. Energy or aptitude to begin an action

_____d. Self-incorporation of guiding principles through learning or socialization processes

_____e. Urinary incontinence after the age when urethral sphincter control can normally be expected

_____f. Fecal incontinence not due to illness or organic defect

1. Discipline
2. Enuresis
3. Guidance
4. Initiative
5. Encopresis
6. Internalize

2. Describe Erikson's developmental stage of "initiative versus guilt."

TEST

3. Select from the following list characteristics of the preschool child. Write an "X" in the blank before each correct answer.

______a. Develops a world of fantasy

______b. Develops a sense of initiative

______c. Becomes fairly independent

______d. Does not play well with other children in this age group

______e. Learns to play with others; begins to learn to share belongings

______f. Keeps in constant motion and must be monitored to prevent injuries

______g. Feels more secure in the world; has adjusted to mother's absence more easily

______h. Uses imaginative play and make-believe stories; cannot distinguish between reality and fantasy

______i. Does not need encouragement of initiative at this age due to immaturity

______j. Becomes more skilled in motor and coordination tasks

______k. Is extremely dependent on parent of same sex

______l. Tries new language skills, at times inappropriately and loudly

______m. Can sit still for longer periods of time because of increased attention span

______n. Imitates adult behavior, especially adult of same sex

4. Describe general biological growth and development of the preschool child.

a. Weight-- ____

____

____

b. Height-- ____

____

____

c. Teeth-- ____

____

TEST

d. Trunk and extremities-- ____________________

____

____

____

____

5. State psychological expectations for the preschool child.

   a. ____________________

   ____

   b. ____________________

   ____

   c. ____________________

   ____

   d. ____________________

   ____

   e. ____________________

   ____

6. State ways in which preschool children can be assisted in social awareness and development of relationships.

   a. ____________________

   ____

   b. ____________________

   ____

   c. ____________________

   ____

   d. ____________________

   ____

   e. ____________________

   ____

TEST

f. ______________________________

____

g. ______________________________

____

h. ______________________________

____

i. ______________________________

____

7. Describe language and learning development of the preschool child.

   a. Language-- ______________________________

   ____

   ____

   ____

   ____

   b. Learning-- ______________________________

   ____

   ____

   ____

   ____

   ____

   ____

8. State four behaviors each of the three-, four-, and five-year-old age groups.

   a. Three-year-old

      1) ______________________________

      2) ______________________________

      3) ______________________________

      4) ______________________________

TEST

b. Four-year-old

1) ______________________________

2) ______________________________

3) ______________________________

4) ______________________________

c. Five-year-old

1) ______________________________

2) ______________________________

3) ______________________________

4) ______________________________

9. Select from the following list ways to guide and discipline the preschool child. Write an "X" in the blank before each correct answer.

_____a. Be consistent

_____b. Give simple directions and answer questions as simply as possible

_____c. Do not be concerned about temper tantrums; these are normal behaviors

_____d. Offer choices only when a choice is actually available

_____e. Be concerned about ambivalent feelings

_____f. Give suggestions and directions in a positive manner; avoid using *no* and *don't*

_____g. Motivate child through attention, approval, and compliments

_____h. Do not expect preschooler to assume any responsibilities

_____i. Inform child in advance of expected behavior

_____j. Always give child freedom of choice

_____k. Encourage child to be independent and to assume responsibility for behavior

_____l. Become a role model for the child

_____m. Try to channel destructive or aggressive behavior productively

_____n. Gradually impose and remove limits or restrictions as child shows ability to take on more responsibilities

TEST

(NOTE: Test questions 10 and 11 list the assignment and job sheets. They are an important part of this test. If they have not been completed, check with your instructor.)

10. Interview a preschool child.

11. Demonstrate the ability to make a feely box.

GROWTH AND DEVELOPMENT OF THE PRESCHOOL CHILD
UNIT III

ANSWERS TO TEST

1. a. 1
   b. 3
   c. 4
   d. 6
   e. 2
   f. 5

2. Description should include the following

   a. Children are seeking new experiences and are questioning and exploring their own bodies and environments

   b. Children are developing both a sense of right and wrong and a conscience

   c. Sense of guilt can arise if children are made to feel that imaginings and activities are wrong

   d. Children are exploring their environments with all of their new-found motor skills and knowledge; the need for positive guidance and the influence of an understanding caregiver can prove to be a deciding factor in how the child accomplishes tasks at this age

3. b, c, e, f, g, h, j, l, m, n

4. Descriptions should include the following

   a. Weight

      1) Average weight gain is from 5 to 6 pounds per year

      2) Weight should be between 40 to 45 pounds by the age of five

   b. Height

      1) Average height gain ranges from 2 to 2 1/2 inches per year

      2) Height is about 4 feet in older preschoolers

   c. Teeth--Preschool child should have a full set of deciduous teeth

   d. Trunk and extremities

      1) Spinal column develops normal curvatures; lordosis seen in toddlers should be corrected due to stronger, more-developed muscles

ANSWERS TO TEST

2) Eye-hand coordination is improved

3) Contours of arms and legs are firmer because of strengthening of muscles

4) Muscle control needed for climbing, reaching, and lifting is improved

5. a. Becomes independent

   b. May change attachment for the sex role of the caregiver

   c. Is eager to please and to be helpful

   d. Develops a basic sense of right and wrong and a conscience

   e. Develops fears of mutilation, body injuries, and other fears

6. a. Identify roles of jobs and persons who do particular tasks

   b. Help children of this age learn about dangers of getting into cars with strangers, accepting candy or gifts from strangers

   c. Help them to look at themselves and how they have grown physically and emotionally

   d. Provide opportunities for children to socialize with other children their age and older

   e. Allow children to work out relationships with other children when possible

   f. Structure responsibilities of preschoolers and begin laying groundwork of expectations for their behavior

   g. Allow preschoolers to cling to security objects when under stress

   h. Allow children to have pretend friends; it is not necessary to agree that the friend is real, but agree that it is fun to have one

   i. Assist children in working through sibling rivalry

7. Description should include

   a. Language

      1) Language is being learned at a very rapid rate

      2) Undesirable language usually has little significance, as the child does not fully comprehend what he or she has said; disapproval should be expressed, but do not make an issue of it

ANSWERS TO TEST

b. Learning

1) Learning skills are developed by stimulating the child through new experiences and by letting the child think, make mistakes, and comprehend on his or her own

2) Atmosphere for learning is set by enthusiasm of the caregiver to learn and to provide time for activities that stimulate imagination

3) Preschoolers learn by repetition and must be allowed to work through the frustration of trial and error

4) All questions should be answered simply, honestly, and as promptly as possible

8. a. Three-year-old

1) Runs and jumps well

2) Uses eating utensils well

3) Learns to wash hands, brush teeth, and assist with bath

4) Dresses self, but still needs help with buttons and other fasteners

5) Helps with small tasks

6) Can draw a circle and simple pictures

b. Four-year-old

1) Is less willing to do as told; initiates activities and is adventurous

2) Has increased self-confidence

3) Adapts more easily to change of routine

4) Can use scissors and draw a circle and a square

5) May have imaginary playmate

6) Begins to experience fears such as fear of injury, the dark, animals, and strangers

7) Becomes aware of sexual differences but may prefer playmates of the same sex

8) Begins to wonder about death and dying

9) Enjoys playing dress up

10) Begins to show off and want own way

ANSWERS TO TEST

c. Five-year-old

  1) Becomes ready to join the larger world outside the family

  2) Becomes less fearful and more sure of self and ability

  3) Learns to print own name and other letters

  4) Can play games controlled by rules

  5) Has a longer attention span and can complete simple projects

9. a, b, d, f, g, i, k, l, m, n

10. Evaluated to the satisfaction of the instructor

11. Performance skills evaluated to the satisfaction of the instructor

GROWTH AND DEVELOPMENT OF THE SCHOOL-AGE CHILD
UNIT IV

UNIT OBJECTIVE

After completing this unit, the student should be able to prepare a program on health awareness for school-age children. This knowledge will be shown by completing the assignment sheet and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Define terms associated with the growth and development of the school-age child.
2. Describe Erikson's developmental stage of "industry versus inferiority."
3. Select from a list general characteristics of the school-age child.
4. Select from a list general characteristics of biological growth and development of the school-age child.
5. Describe secondary sex characteristics for male and female school-age children.
6. State ways to assist the school-age child to progress through the dependence-independence stage of development.
7. Select from a list guidelines used to assist the school-age child to develop social awareness and self-confidence.
8. Describe the learning process for the school-age child.
9. Describe areas of concern for the school-age child.
10. Prepare a program on health awareness for school-age children.

GROWTH AND DEVELOPMENT OF THE SCHOOL-AGE CHILD
UNIT IV

SUGGESTED ACTIVITIES

I. Suggested activities

   A. Order materials planned to supplement unit

      1. Filmstrips

         a. *Child Development: Implications for Nursing Care.*

         b. *Physical Assessment of the School-Age Child.* A series of six filmstrips covering the cardiovascular system, the abdomen, the musculoskeletal system, the neurological system, and the genitalia.

         (NOTE: These filmstrips available from the Trainex Corporation, P.O. Box 116, Garden Grove, California 92642.)

      2. Film--*Then One Year.* Color, 19 min. Churchill Films, 1972.

         (NOTE: This film is available on a free-loan basis only to Oklahoma teachers. These teachers may order from the Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1500 West Seventh Avenue, Stillwater, Okla-74074. Out-of-state teachers must order from Churchill Films.)

   B. Provide students with objective sheet.

   C. Provide students with information and assignment sheets.

   D. Discuss unit and specific objectives.

   E. Discuss information and assignment sheets.

   F. Obtain permission to present the programs on health awareness in one or two elementary school classes using the guidelines in Assignment Sheet #1.

      (NOTE: If it is not possible to present program in regular classrooms with school-age children, have students present to their own class.)

   G. Develop appropriate learning activities for special needs students.

   H. Give test.

   I. Reteach if necessary.

SUGGESTED ACTIVITIES

II. Instructional materials

  A. Objective sheet

  B. Suggested activities

  C. Information sheet

  D. Assignment Sheet #1--Prepare a Program on Health Awareness for School-Age Children

  E. Answers to assignment sheet

  F. Test

  G. Answers to test

III. Unit references

  A. Marlow, Dorothy R. *Textbook of Pediatric Nursing,* 5th Ed. Philadelphia: W.B. Saunders Company, 1977.

  B. Pringle, Sheila M., and Brenda E. Ramsey. *Promoting the Health of Children: A Guide for Caretakers and Health Professionals.* St. Louis: The C.V. Mosby Company, 1982.

  C. Whaley, Lucille, and Donna L. Wong. *Essentials of Pediatric Nursing.* St. Louis: The C.V. Mosby Company, 1982.

GROWTH AND DEVELOPMENT OF THE SCHOOL-AGE CHILD
UNIT IV

INFORMATION SHEET

I. Terms and definitions

  A. Nocturnal emission--Involuntary discharge of semen during sleep

  B. Ossification--Formation of bone substance; conversion of other tissue into bone

  C. School-age child--Child between six and twelve years of age

II. Erikson's developmental stage of "industry versus inferiority"

  A. Children at this age want to engage in tasks and activities in which they can be successful

  B. Children are learning to win recognition by producing things, exploring, and collecting items

  C. Competing with others and learning to cooperate is crucial at this time

  D. Feelings of inadequacy and inferiority can develop if too much is expected, or if children do not feel they can measure up to the standards of their parents, peers, or themselves

  E. Significant others now include neighbors and schoolmates

III. General characteristics of the school-age child

  A. Continues to learn and to develop new skills but now directs these skills toward more specific goals

  B. Needs to learn rules and accept directions from authority figures

  C. Finds that school will not only direct education but will be a means of social contact with others

  D. Tends to remain with same sex when placed in group activities with both sexes

  E. Begins at about age ten to take notice of cost of items, and seeks outside jobs based on skills learned at home

  EXAMPLES: Babysitting, mowing lawns

  F. May parrot attitudes of family and express predjudices

  G. Is blunt in pointing out faults and is insensitive to other's feelings

  H. Experiences growth spurt at about age ten to twelve; begins to develop secondary sex characteristics; stage for heterosexual relationships begins

INFORMATION SHEET

IV. General characteristics of biological growth and development of the school-age child

(NOTE: Each child is unique in his or her growth pattern. Girls grow and mature more rapidly than boys in this preadolescent stage. This can be rather frustrating to some children. Some children experience frustration when their peers grow more rapidly than they.)

A. Weight

1. Average weight gain ranges from five to seven pounds each year
2. Average weight is about 78 to 85 pounds by age twelve

B. Height

1. Average height growth is about 2 1/2 inches each year
2. Child begins to fill out and growth rate stabilizes

(NOTE: Children entering this stage appear thinner as they have lost baby fat and are growing taller.)

C. Teeth

1. Loss of deciduous teeth is common
2. Dental caries are a common problem; dental care should be sought at prescribed intervals

D. Trunk and extremities

1. Ossification of the long bones continues
2. Muscles become stronger and larger
3. Posture should be straight and erect
4. Domination of right or left side becomes apparent

V. Secondary sex characteristics for male and female school-age children

(NOTE: Development of secondary sex characteristics occurs at the end of this stage.)

A. Male

1. Development begins at about age ten to twelve
2. Testes and penis begin to enlarge
3. Pubic hair appears

INFORMATION SHEET

4. Voice changes occur
5. Nocturnal emissions, or "wet dreams," may begin to occur
6. Body hair begins to develop slowly
7. Skeletal growth is noticeable, but not until some time after secondary sex characteristics are seen
8. Muscle masses begin to be larger; chest and shoulders broaden

B. Female

1. Development begins at about age nine to twelve
2. Breasts begin to enlarge and become tender
3. Hips become broader
4. Pubic hair and axillary hair become noticeable
5. Vaginal changes occur, including thickening of the mucosal lining and pH change from alkaline to acid
6. Nipple and areolar pigmentation changes occur
7. Spurt in skeletal growth occurs
8. Menstrual cycle begins

C. Both sexes

1. Changes in personality are influenced by hormonal changes

   (NOTE: Children in this age group are often called *lazy, moody,* or *clumsy.)*

2. Acceptance by parents and peers helps support these children and give them a positive self-image

VI. Ways to assist the school-age child to progress through dependence-independence stage of development

(NOTE: Children at this age want to become independent and to be able to do things away from home with peers and yet still need to be dependent on family for the security of the familiar structure.)

A. Set standards and voice expectations for each member of the family and adhere to those standards

B. Encourage but do not push child into outside activities with peer groups

C. Assist child to learn leadership roles by becoming a role model

INFORMATION SHEET

D. Decide if child is to earn an allowance and what types of responsibilities he or she will assume to earn that allowance

E. Involve child in decisions to be made that will involve family plans

F. Encourage child to develop learning skills; provide an atmosphere conducive for learning

G. Accept child for what he or she is; allow child to experiment within certain guidelines and to make mistakes and learn from them

VII. Guidelines used to assist the school-age child to develop social awareness and self-confidence

A. Provide a variety of opportunities for school-age child to have social experiences

B. Assist child in correct behavior and etiquette used in social settings

C. Assist child in finding and securing a comfortable position in the family unit and prepare him or her to do the same in outside settings

D. Keep an open line of communication and do not talk down to child

E. Permit child to have some choices in his or her lifestyle without being critical

(NOTE: At this stage it is important to the child to be like other children. The child feels that wearing certain clothes and hairstyles and using a certain language style are important to fit in with the peer group.)

F. Encourage group activities with both sexes toward the late period of this stage, but do not force boy/girl relationships

(NOTE: At the age of nine or ten, groups of children of the same sex stay together for activities. Toward the end of this stage, heterosexual groups may begin to gather for social outings.)

G. Know that hero worship may develop between child and another adult and accept this as a normal part of growing up

H. Know that child is highly competitive in sports and within the family group; encourage activities

I. Use rewards and recognition to motivate child to do household tasks in which he or she has lost interest

VIII. Learning process for the school-age child

(NOTE: In the earlier years, play was the work for a child, but now school becomes the main work of the school-age child. Habits for learning are now being developed.)

A. Child is now able to deal with more abstract thinking and to perform more fine skills

INFORMATION SHEET

B. Child is more able to conceptualize ideas of time, space, depth, and structure

C. Competition with classmates may motivate child to learn

D. Television can be an excellent teaching tool, or it may be detrimental to the child's learning

E. Child may do well at book learning or may feel that outside skills are easier and more important

(NOTE: Children need to know that both academic and outside skills are important in the learning process, yet the caregiver should not be judgmental and should accept and encourage the child in whichever skill is chosen.)

F. Child may show signs of a learning disability

(NOTE: Learning disabilities should be detected as soon as possible and special assistance should be given before a failure pattern is established and the child is labeled.)

IX. Areas of concern for the school-age child

A. Nutrition

1. Children of this age consume more "junk food" or empty-calorie foods because of their exposure to outside activities

2. Providing the right types of food is important because the child's growing body needs essential nutrients, vitamins, and minerals that enhance healthy growth

B. Dental health

1. Children may not care for their teeth and need to be encouraged in good dental hygiene

2. Foods they eat and dental hygiene they follow are important at this time in development and maintenance of healthy secondary teeth

C. Safety

1. The school-age child desires to explore and do everything possible even to the point of entering dangerous activities known or unknown to him or her

2. Many children try to overextend their capabilities, and accidents frequently happen to children of this age on bikes, skateboards, minibikes, or other vehicles

INFORMATION SHEET

D. Sex education

1. It is important for school-age children to understand their bodies and the changes that are occuring

2. Children should have the opportunity to discuss and learn about the normal physical and emotional changes that they will experience

E. Infectious diseases

1. Children should be taught hygenic measures such as washing hands after using restroom and covering nose and mouth when sneezing or coughing to prevent infectious diseases from being spread

2. Immunizations from infectious diseases should be a part of the child's medical routine

   (NOTE: Specific immunizations must be given before the child enters school.)

GROWTH AND DEVELOPMENT OF THE SCHOOL-AGE CHILD
UNIT IV

ASSIGNMENT SHEET #1--PREPARE A PROGRAM ON HEALTH AWARENESS FOR SCHOOL-AGE CHILDREN

NAME ______________________________ SCORE __________

As school-age children become more aware of the outside world, they must learn many things. The home environment is much more controlled than the outside world, and there is less exposure to a variety of health hazards or areas that concern parents and health caregivers. As health professionals we need to be able to give children information and guidelines on how to stay healthy and to answer any questions they may have concerning their growth and development.

Select an area of concern that interests you, and develop a program that could be presented to a school class for this age group. Research your topic, plan your presentation, make posters, and games, collect real items, develop handouts, and be ready to give a ten-minute presentation to this group of students. If your instructor arranges for you to make the presentation to a real schoolroom full of students, be prepared for many questions. Be sure you relate the information at the children's knowledge level.

GROWTH AND DEVELOPMENT OF THE SCHOOL-AGE CHILD
UNIT IV

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

GROWTH AND DEVELOPMENT OF THE SCHOOL-AGE CHILD
UNIT IV

TEST

NAME ______________________ SCORE __________

1. Define the following terms.

   a. Nocturnal emission--______________________

   ____

   b. Ossification--______________________

   ____

   c. School-age child--______________________

   ____

2. Describe Erikson's developmental stage of "industry versus inferiority."

   ____

   ____

   ____

   ____

   ____

   ____

   ____

   ____

3. Select from the following list general characteristics of the school-age child. Write an "X" in the blank before each correct answer.

   _____a. Needs to learn rules and accept directions from authority figures

   _____b. Tends to be anti-social

   _____c. Begins at about age ten to take notice of cost of items, and seeks outside jobs based on skills learned at home

   _____d. Experiences growth spurt at about age ten to twelve; begins to develop secondary sex characteristics; stage for heterosexual relationships begins

   _____e. Is very independent

TEST

_____f. Enuressis is not a problem

_____g. Continues to learn and to develop new skills but now directs these skills toward more specific goals

_____h. Parallel play is common

_____i. May parrot attitudes of family and express prejudices

_____j. Has excellent appetite

_____k. Finds that school will not only direct education but will be a means of social contact with others

_____l. Tends to remain with same sex when placed in group activities with both sexes

_____m. Is blunt in pointing out faults and is insensitive to other's feelings

4. Select from the following list general characteristics of biological growth and development of the school-age child. Write an "X" in the blank before each correct answer.

a. Weight

_____ 1) Average weight is about 78 to 85 pounds by age twelve

_____ 2) Average weight gain ranges from two to three pounds each year

_____ 3) Gains weight more rapidly than the infant

_____ 4) Average weight gain ranges from five to seven pounds each year

b. Height

_____ 1) Average height growth is about 2 1/2 inches each year

_____ 2) Child begins to fill out and growth rate stabilizes

_____ 3) More rapid growth spurt at this age than any other stage

_____ 4) Average height growth is about four inches each year

c. Teeth

_____ 1) Dental care limited at this age because of changes and loss of teeth

_____ 2) Dental caries are a common problem; dental care should be sought at prescribed intervals

_____ 3) Loss of deciduous teeth is common

_____ 4) Appearance of all permanent teeth is common

TEST

d. Trunk and extremities

_____ 1) Posture should be straight and erect

_____ 2) Domination of right or left side becomes apparent

_____ 3) Ossification of the long bones is complete

_____ 4) Limbs are becoming more proportionate in relationship to trunk

_____ 5) Muscles become stronger and larger

_____ 6) Ossification of the long bones continues

5. Describe secondary sex characteristics for male and female school-age children.

a. Male

b. Female

TEST

c. Both sexes

____

____

____

6. State ways to assist the school-age child to progress through the dependence-independence stage of development.

a. ______________________________

____

b. ______________________________

____

c. ______________________________

____

d. ______________________________

____

e. ______________________________

____

f. ______________________________

____

g. ______________________________

____

7. Select from a list guidelines used to assist the school-age child to develop social awareness and self-confidence. Write an "X" in the blank before each correct answer.

_____a. Keep an open line of communication and do not talk down to child

_____b. Permit child to have some choices in his or her lifestyle without being critical

_____c. Assist child in the correct behavior and etiquette used in social settings

_____d. Understand that role modeling will take place in a later stage

_____e. Discourage any type of hero worship to discourage child from living in fantasy world

TEST

______ f. Provide a variety of opportunities for school-age child to have social experiences

______ g. Encourage group activities with both sexes toward the late period of this stage, but do not force boy/girl relationships

______ h. Know that hero worship may develop between child and another adult and accept this as a normal part of growing up

______ i. Discourage participation in group activities as child is not mature enough for activities

______ j. Assist child in finding and securing a comfortable position in the family unit and prepare him or her to do the same in outside settings

______ k. Be extremely flexible in allowing child freedom to structure his or her own life

______ l. Know that child is highly competitive in sports and within the family group; encourage activities

______ m. Use rewards and recognition to motivate child to do household tasks in which he or she has lost interest

8. Describe the learning process for the school-age child.

____

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____

9. Describe areas of concern for the school-age child.

a. Nutrition

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TEST

b. Dental health

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c. Safety

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d. Sex education

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e. Infectious diseases

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TEST

(NOTE: Test question 10 lists the assignment sheet. It is an important part of this test. If it has not been completed, check with your instructor.)

10. Prepare a program on health awareness for school-age children.

GROWTH AND DEVELOPMENT OF THE SCHOOL-AGE CHILD
UNIT IV

ANSWERS TO TEST

1. a. Involuntary discharge of semen during sleep

   b. Formation of bone substance; conversion of other tissue into bone

   c. Child between six and twelve years of age

2. Description should include the following

   a. Children at this age want to engage in tasks and activities in which they can be successful

   b. Children are learning to win recognition by producing things, exploring and collecting items

   c. Competing with others and learning to cooperate is crucial at this time

   d. Feelings of inadequacy and inferiority can develop if too much is expected, or if children do not feel they can measure up to the standards of their parents, peers, or themselves

   e. Significant others now include neighbors and schoolmates

3. a, c, d, g, i, k, l, m

4. a. Weight

   1, 4

   b. Height

   1, 2

   c. Teeth

   2, 3

   d. Trunk and extremities

   1, 2, 5, 6

5. Descriptions should include the following

   a. Male

   1) Development begins at about age ten to twelve

   2) Testes and penis begin to enlarge

ANSWERS TO TEST

3) Pubic hair appears

4) Voice changes occur

5) Nocturnal emissions, or "wet dreams," may begin to occur

6) Body hair begins to develop slowly

7) Skeletal growth is noticeable, but not until some time after secondary sex characteristics are seen

8) Muscle masses begin to be larger; chest and shoulders broaden

b. Female

1) Development begins at about age nine to twelve

2) Breasts begin to enlarge and become tender

3) Hips become broader

4) Pubic hair and axillary hair become noticeable

5) Vaginal changes occur, including the thickening of the mucosal lining and pH change from alkaline to acid

6) Nipple and areolar pigmentation changes occur

7) Spurt in skeletal growth occurs

8) Menstrual cycle begins

c. Both sexes

1) Changes in personality are influenced by hormonal changes

2) Acceptance by parents and peers helps support these children and give them a positive self-image

6. a. Set standards and voice expectations for each member of the family and adhere to those standards

b. Encourage but do not push child into outside activities with peer groups

c. Assist child to learn leadership roles by becoming a role model

d. Decide if child is to earn an allowance and what types of responsibilities he or she will assume to earn that allowance

e. Involve child in decisions to be made that will involve family plans

ANSWERS TO TEST

- f. Encourage child to develop learning skills; provide an atmosphere conducive for learning
- g. Accept child for what he or she is; allow child to experiment within certain guidelines and to make mistakes and learn from them

7. a, b, c, f, g, h, j, l, m

8. Description should include the following
   - a. Child is now able to deal with more abstract thinking and to perform more fine skills
   - b. Child is more able to conceptualize ideas of time, space, depth, and structure
   - c. Competition with classmates may motivate child to learn
   - d. Television can be an excellent teaching tool, or it may be detrimental to the child's learning
   - e. Child may do well at book learning or may feel that outside skills are easier and more important
   - f. Child may show signs of a learning disability

9. Descriptions should include the following
   - a. Nutrition
     - 1) Children of this age consume more "junk food" or empty-calorie foods because of their exposure to outside activities
     - 2) Providing the right types of food is important because the child's growing body needs essential nutrients, vitamins, and minerals that enhance healthy growth
   - b. Dental health
     - 1) Children may not care for their teeth and need to be encouraged in good dental hygiene
     - 2) Foods they eat and dental hygiene they follow are important at this time in development and maintenance of healthy secondary teeth
   - c. Safety
     - 1) The school-age child desires to explore and do everything possible to the point of entering dangerous activities known or unknown to him or her

ANSWERS TO TEST

2) Many children try to overextend their capabilities, and accidents frequently happen to children of this age on bikes, skateboards, minibikes, or other vehicles

d. Sex education

1) It is important for school-age children to understand their bodies and the changes that are occurring

2) Children should have the opportunity to discuss and learn about the normal physical and emotional changes that they will experience

e. Infectious diseases

1) Children should be taught hygenic measures such as washing hands after using restroom and covering nose and mouth when sneezing or coughing to prevent infectious diseases from being spread

2) Immunizations from infectious diseases should be a part of the child's medical routine

10. Evaluated to the satisfaction of the instructor

GROWTH AND DEVELOPMENT OF THE ADOLESCENT
UNIT V

UNIT OBJECTIVE

After completing this unit, the student should be able to identify current areas of concern for adolescents and discuss ways of dealing with these problems. This knowledge will be shown by completing the assignment sheet and unit test with a minimum score of 85 percent.

SPECIFIC OBJECTIVES

After completing this unit, the student should be able to

1. Match terms associated with the growth and development of the adolescent to their correct definitions.
2. Describe Erikson's developmental stage of "identity versus role confusion."
3. Describe general characteristics of the adolescent.
4. State guidelines in assisting the adolescent to progress through the dependence-independence-interdependence stage.
5. Describe general biological growth and development of the adolescent.
6. Match hormones that affect sexual maturation of the adolescent to their actions.
7. Describe characteristics of sexual maturation in the adolescent girl and boy.
8. List areas of concern for the adolescent.
9. Analyze present areas of concern for adolescents.

GROWTH AND DEVELOPMENT OF THE ADOLESCENT
UNIT V

SUGGESTED ACTIVITIES

I. Suggested activities

   A. Order materials planned to supplement unit

      1. Filmstrips

         a. *Child Development: Implications for Nursing Care*

         b. *Gynecologic Exam*

         c. *Reproductive Systems and Sexual Identity*

         (NOTE: These filmstrips are available through the Trainex Corporation, P.O. Box 116, Garden Grove, California 92642)

         d. *Human Development: The Adolescent Years, 12 to 16*

         e. *Human Development: Dilemmas of 6 Adolescents*

         (NOTE: These filmstrips are available through Concept Media, P.O. Box 19542, Irvine, California 92714)

      2. Films

         a. *Puberty in Boys.* Color, 10 minutes, Films, Inc. Available from Films, Inc., 733 Greenbay Road, Wilmette, Illinois 60091

         b. *Teenage Father.* Color, 28 minutes, CHSOC, Childrens' Home Society of California. Available from Childrens' Home Society of California, 5429 McConnell Avenue, Los Angeles, California 90066.

         c. *Prisoners of Chance.* Color 23 minutes, Filmfair Communications. Available from Filmfair Communications, 10900 Ventura Boulevard, Box 1728, Studio City, California 91604

         (NOTE: These films are available on a free-loan basis to Oklahoma teachers only. Oklahoma teachers may order films from the Oklahoma State Department of Vocational and Technical Education/Curriculum and Instructional Materials Center, 1500 West Seventh Avenue, Stillwater, Oklahoma 74074. Out-of-State teachers must order from the addressis accompanying the films.

         d. *Preventing Teen Suicide*

         e. *He Was Only 17*

         f. *The Death of a Friend*

         (NOTE: Films listed above are available from Sunburst Communications, 89 Washington Avenue, Pleasantville, New York 10570 [800-431-1934].)

SUGGESTED ACTIVITIES

3. Pamphlets--Send for catalog for a series of pamphlets and booklets addressing problems that affect adolescents, RMPP, a division of Rocky Mountain Planned Parenthood, 1852 Vine Street, Denver, Colorado 80206.

B. Provide students with objective sheet.

C. Provide students with information and assignment sheets.

D. Discuss information and assignment sheets.

E. Call your local health department to see if they provide services for adolescents or if they have anyone who works with adolescents. Invite the person(s) to speak to the class on the services provided.

EXAMPLES: Drug abuse centers, counseling for teens, or family planning centers; clinician that deals with teenage pregnancy, child abuse, or other health related problem areas

F. Obtain permission from your local high school to put on a one-day Health Awareness workshop, and include health care subjects that relate to adolescents.

EXAMPLES: Good grooming--have cosmetic company discuss skin care, have barbers or hair dressers for hairstyles. Obtain information from county health department to assist in finding pamphlets, films, or other information that you can present to cover good nutrition, drug abuse, and other areas of concern.

(NOTE: If you plan to show any films or give information concerning birth control, venereal disease, or teenage pregnancy be sure that you get full permission from school and/or parents or guardians.)

G. Develop appropriate learning activities for special needs students.

H. Give test.

I. Reteach if necessary.

II. Instructional materials

A. Objective sheet

B. Suggested activities

C. Information sheet

D. Assignment Sheet #1--Analyze Present Areas of Concern for Adolescents

E. Answers to assignment sheet

F. Test

G. Answers to test

SUGGESTED ACTIVITIES

III. Unit references

A. Marlow, Dorothy. *Textbook of Pediatric Nursing,* 5th edition. Philadelphia: W.B. Saunders Company, 1977.

B. Pringle, Sheila M., and Brenda E. Ramsey. *Promoting the Health of Children: A Guide for Caretakers and Health Care Professionals.* St. Louis: The C.V. Mosby Company, 1982.

C. Whaley, Lucille F., and Donna L. Wong. *Essentials of Pediatric Nursing.* St. Louis: The C.V. Mosby Company, 1982.

GROWTH AND DEVELOPMENT OF THE ADOLESCENT
UNIT V

INFORMATION SHEET

I. Terms and definitions

   A. Adolescence--Period of youth extending from the development of secondary sex characteristics to full body development and personal maturity; roughly the period from twelve to eighteen years of age

   B. Ephebiatrics--Study of adolescence

   C. Ephebiatrist--Physician who specializes in the care of adolescents

   D. Menarche--First menses

   E. Nocturnal emission--Involuntary discharge of semen during sleep

   F. Puberty--Period at which biological changes reach a climax

   G. Pubescent period--Time from onset of biological changes until puberty

II. Erikson's developmental stage of "identity versus role confusion"

   A. Adolescent experiences many physical and emotional changes

   B. Adolescent is preoccupied with body image and acceptance into society, especially peer group acceptance

   C. Adolescent struggles to be independent yet must rely on family for basic support

   D. Adolescent establishes concepts and values, and chooses a lifestyle

   E. Adolescent may choose an occupation

   F. Identity crisis and confusion result when adolescent fails to find where he or she fits into this world

III. General characteristics of the adolescent

   A. Adolescent experiences uncertainty as new emotions, changes in body appearance, and lack of internal control develop

   B. Adolescent wants to be considered an adult yet wants to retain the carefree stage of life as a child

   C. Adolescent continues to develop mental and physical capabilities, and begins to look toward future vocation

   D. Serious differences of opinion may occur between adolescent and caregiver when lifestyles, ideas, and concepts differ

INFORMATION SHEET

IV. Guidelines in assisting the adolescent to progress through the dependence-independence-interdependence stage

(NOTE: Adolescents strive to gain their total independence only to feel alone when they accomplish this task. They want to appear self-sufficient and mature but still need help, guidance, and limit-setting.)

A. Set and enforce limits

B. Encourage adolescent to make choices, set goals, and become independent within limits

(NOTE: Limits that are set should be based on the adolescent's age, the trust you have in him or her, and the responsibilities that he or she has been able to take.)

C. Keep an open line of communication with adolescent; let him or her know that you are setting limits because you care

(NOTE: Some adolescents will complain about the limits put upon them, but limits are needed and actually wanted.)

D. Make sure that caregiver is primary source of information, or adolescent may make faulty assumptions based on information obtained from television, friends, or other media

E. Provide an atmosphere that encourages dependence but provides room for independent and interdependent behavior

F. Allow adolescent to be part of decision making

G. Involve adolescent in accountability and responsibility, and reward with privileges earned

EXAMPLE: Use of the family car one night a week based on his or her agreement and fulfillment of responsibilities

H. Understand adolescent's need for privacy and to be with friends

I. Welcome adolescent's friends and peers and invite these friends to participate in group activities

V. General biological growth and development of the adolescent

A. Weight

1. Gain of each adolescent is unique, depending on food intake, amount of physical activity, and biological makeup

(NOTE: Serious problems can occur at this stage, including obesity and a condition called anorexia nervosa. Teenage girls as they begin to round out will be quite concerned that they may become fat. By consuming small amounts, and then no food at all, they begin to slowly starve themselves to death. Obesity may also be a problem with the consumption of large amounts of foods containing carbohydrates, starches, and fats. Adolecents may need counseling concerning diet.)

INFORMATION SHEET

2. Most weight and height charts indicate an average weight for sex, age, and height that may be used to determine the adolecent's correct average

B. Height

1. Adult height is usually seen by end of the nineteenth year

2. Adolescent who did not experience the growth spurt usually seen in late school-age may be late bloomer and should be reassured

C. Trunk and extremities

1. Length, shape, and size of extremities should now be the adult proportions unique to that individual

2. Posture at this time should be that of an adult

VI. Actions of hormones that affect sexual maturation of the adolescent

A. Estrogen--Responsible for the development of secondary sex characteristics in the female and for cyclic changes in the vaginal epethelium and uterine endothelium

B. Testosterone--Steroid that stimulates blood flow and accelerates growth in tissues upon which it acts; responsible for the stimulation and growth of secondary sex characteristics in the male, and essential for normal sexual behavior and the occurence of erections

(NOTE: Testosterone is also responsible for the deepening of the male voice at puberty, greater muscular development in men, and for the development of beard and pubic hair.)

VII. Characteristics of sexual maturation in the adolescent girl and boy

A. Adolescent girl

1. Maturation process takes about five years and may begin at age eight or nine

2. Changes such as increase in width of pelvis and beginning of breast development take place after first growth spurt

3. Pubic hair and axillary hair appear as maturation process progresses

4. Menarche usually occurs by age twelve; it may occur as early as age eight or as late as age fifteen

5. Production of ova begins about one year after menarche; uterine maturity occurs a short time later

6. Maximum rate of growth is reached about three years after the onset of puberty and is usually completed by age fourteen or fifteen

INFORMATION SHEET

B. Adolescent boy

1. Maturation process takes about seven years
2. Size of external genitalia increases, followed by appearance of pubic hair, and then axillary and facial hair
3. Larynx grows and voice begins to deepen noticeably at about age fifteen
4. Erections and nocturnal emissions begin at about age fourteen
5. Production of sperm occurs at about age fifteen
6. Rate of growth may be rapid and uneven, with arms and legs growing out of proportion to rest of body
7. Growth is usually completed by age twenty or twenty-one

VIII. Areas of concern for the adolescent (Assignment Sheet #1)

A. Lack of nutritious diet

B. Lack of sleep

C. Pregnancy

D. Drug abuse

E. Suicide

F. Venereal diseases

G. Running away from home

H. Automobile accidents

I. Drunk-driving accidents

GROWTH AND DEVELOPMENT OF THE ADOLESCENT
UNIT V

ASSIGNMENT SHEET #1--ANALYZE PRESENT AREAS OF CONCERN FOR ADOLESCENTS

NAME ______________________________ SCORE ______________

Each day the media brings news of problems related to the adolescent in today's society. Drug abuse, teenage pregnancy, runaways, teenage prostitution, venereal diseases, lack of jobs for the young, emotional problems that result in violent crimes, and many other concerns face the adolescent and are making an impact on our world. Newspapers, magazines, articles in journals, and even television specials present these issues and look at ways to solve some of these problems before they destroy the youth.

Select an area of concern that interests you and do some research on the issue. Search at least five sources to obtain the information for your study, outline the material, and summarize the information to hand in to your instructor or to give to the class as an oral report. Remember to check in your own community and to obtain information about any agency, group, or organization that tries to resolve a problem faced by adolescents. Discuss some ways to help resolve the problem.

A. List sources of information

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ASSIGNMENT SHEET #1

B. Outline material

ASSIGNMENT SHEET #1

C. Summarize information

GROWTH AND DEVELOPMENT OF THE ADOLESCENT
UNIT V

ANSWERS TO ASSIGNMENT SHEET

Assignment Sheet #1--Evaluated to the satisfaction of the instructor

GROWTH AND DEVELOPMENT OF THE ADOLESCENT
UNIT V

TEST

NAME ______________________________ SCORE ______________

1. Match terms associated with the growth and development of the adolescent to their correct definitions. Write the correct numbers in the blanks.

_____a. Period of youth extending from the development of secondary sex characteristics to full body development and personal maturity; roughly the period from twelve to eighteen years of age

_____b. Study of adolescence

_____c. Physician who specializes in the care of adolescents

_____d. Period at which biological changes reach a climax

_____e. Time from onset of biological changes until puberty

_____f. First menses

_____g. Involuntary discharge of semen during sleep

1. Ephebiatrist
2. Menarche
3. Adolescence
4. Puberty
5. Ephebiatrics
6. Pubescent period
7. Nocturnal emission

2. Describe Erikson's developmental stage of "identity versus role confusion."

____

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TEST

3. Describe general characteristics of the adolescent.

4. State guidelines in assisting the adolescent to progress through the dependence-independence-interdependence stage.

a.

b.

c.

d.

e.

f.

g.

h.

i.

TEST

5. Describe general biological growth and development of the adolescent.

   a. Weight-- ____
   ____
   ____
   ____
   ____

   b. Height-- ____
   ____
   ____
   ____
   ____

   c. Trunk and extremities-- ____
   ____
   ____
   ____
   ____

6. Match hormones that affect sexual maturation of the adolescent to their actions. Write the correct numbers in the blanks.

_____a. Responsible for the development of secondary sex characteristics in the female and for cyclic changes in the vaginal epethelium and uterine endothelium	1. Testosterone
_____b. Steroid that stimulates blood flow and accelerates growth in tissues upon which it acts; responsible for the stimulation and growth of secondary sex characteristics in the male, and essential for normal sexual behavior and the occurence of erections	2. Estrogen

TEST

7. Describe characteristics of sexual maturation in the adolescent girl and boy.

a. Adolescent girl

1) ______________________________

2) ______________________________

3) ______________________________

4) ______________________________

5) ______________________________

6) ______________________________

B. Adolescent boy

1) ______________________________

2) ______________________________

3) ______________________________

4) ______________________________

5) ______________________________

6) ______________________________

7) ______________________________

TEST

8. List areas of concern for the adolescent.

a. ____
b. ____
c. ____
d. ____
e. ____
f. ____
g. ____
h. ____
i. ____

(NOTE: Test question 9 lists the assignment sheet. It is an important part of this test. If it has not been completed, check with your instructor.)

9. Analyze present areas of concern for adolescents.

GROWTH AND DEVELOPMENT OF THE ADOLESCENT
UNIT V

ANSWERS TO TEST

1. a. 3
   b. 5
   c. 1
   d. 4
   e. 6
   f. 2
   g. 7

2. Description should include the following

   a. Adolescent experiences many physical and emotional changes

   b. Adolescent is preoccupied with body image and acceptance into society, especially peer group acceptance

   c. Adolescent struggles to be independent yet must rely on family for basic support

   d. Adolescent establishes concepts and values, and chooses a lifestyle

   e. Adolescent may choose an occupation

   f. Identity crisis and confusion result when adolescent fails to find where or she fits into this world

3. Description should include the following

   a. Adolescent experiences uncertainty as new emotions, changes in body appearance, and lack of internal control develop

   b. Adolescent wants to be considered an adult yet wants to retain the carefree stage of life as a child

   c. Adolescent continues to develop mental and physical capabilities, and begins to look toward future vocation

   d. Serious differences of opinion may occur between adolescent and caregiver when lifestyles, ideas, and concepts differ

ANSWERS TO TEST

4. a. Set and enforce limits

   b. Encourage adolescent to make choices, set goals, and become independent within limits

   c. Keep an open line of communication with adolescent; let him or her know that you are setting limits because you care

   d. Make sure that caregiver is primary source of information, or adolescent may make faulty assumptions based on information obtained from television, friends, or other media

   e. Provide an atmosphere that encourages dependence, but provides room for independent and interdependent behavior

   f. Allow adolescent to be part of decision making

   g. Involve adolescent in accountability and responsibility, and reward with privileges earned

   h. Understand adolescent's need for privacy and to be with friends

   i. Welcome adolescent's friends and peers and invite these friends to participate in group activities

5. Descriptions should include the following

   a. Weight

      1) Gain of each adolescent is unique, depending on food intake, amount of physical activity, and biological makeup

      2) Most weight and height charts indicate an average weight for sex, age, and height that may be used to determine the adolescent's correct average

   b. Height

      1) Adult height is usually seen by end of the nineteenth year

      2) Adolescent who did not experience the growth spurt usually seen in late school-age may be late bloomer and should be reassured

   c. Trunk and extremities

      1) Length, shape, and size of extremities should now be the adult proportions unique to that individual

      2) Posture at this time should be that of an adult

ANSWERS TO TEST

6. a. 2

   b. 1

7. Descriptions should include the following

   a. Adolescent girl

      1) Maturation process takes about five years and may begin at age eight or nine

      2) Changes such as increase in width of pelvis and beginning of breast development take place after first growth spurt

      3) Pubic hair and axillary hair appear as maturation process progresses

      4) Menarche usually occurs by age twelve; it may occur as early as age eight or as late as age fifteen

      5) Production of ova begins about one year after menarche; uterine maturity occurs a short time later

      6. Maximum rate of growth is reached about three years after the onset of puberty and is usually completed by age fourteen or fifteen

   b. Adolescent boy

      1) Maturation process takes about seven years

      2) Size of external genitalia increases, followed by appearance of pubic hair, and then axillary and facial hair

      3) Larynx grows and voice begins to deepen noticeably at about age fifteen

      4) Erections and nocturnal emissions begin at about age fourteen

      5) Production of sperm occurs at about age fifteen

      6) Rate of growth may be rapid and uneven, with arms and legs growing out of proportion to rest of body

      7) Growth is usually completed by age twenty or twenty-one

8. a. Lack of nutritious diet

   b. Lack of sleep

   c. Pregnancy

   d. Drug abuse

ANSWERS TO TEST

e. Suicide

f. Venereal diseases

g. Running away from home

h. Automobile accidents

i. Drunk-driving accidents

9. Evaluated to the satisfaction of the instructor